Vol. 71

CHICAGO AND NEW YORK

Published every Saturday by The National Provisioner, Inc., Old Colony Bidg., Chicago, Ill.
Entered as second-class matter, Oct. 8, 1919, at the postoffice at Chicago, Ill., under the act of March 3, 1878.
Subscription Price; United States, \$3.00; Canada, \$4.00; All Foreign Countries in Postal Union, \$5.00.

Established 1857

e & Brothe

Pork and Beef Packers and Lard Refiners

344 Produce Exchange

NEW YORK

Curers of the Celebrated "REGAL" Ham, Breakfast Bacon and Shoulder.

Manufacturers of the Famous Brand "PURITY" Lard. Goods for Export and Home Trade in any Desired Package.

Main Office PACKING HOUSES: 534 to 540 W. 37th St. 539 to 543 W. 39th St. 547 to 549 W. 35th St.



A TANKAGE DRYER FOR 20 YEARS' SERVICE

Hundreds of Triumph Tankage Dryers have seen more than fifteen years' service and a good many are close to the quarter century mark. You can expect Triumph Dryers to run for twenty years, and you won't be disappointed. Bulletin 40 tells all about Triumph Tankage Dryers. Write for it.

The C. O. Bartlett & Snow Co.

Main Office and Works: Cleveland, Ohio

Morris' Supreme Anhydrous Ammonia Absolutely Pure Perfectly Dry

"Every ounce energizes"

25 - 50 - 100 - 150 Lb. Cylinders

Every Cylinder Subject to Your Test Before Using. Write for prices.

MORRIS & COMPANY

Branch of the North American Provision Co. CHICAGO

M-239

Packing House Chemists

CHEMICAL & ENGINEERING CO - Manhattan Building - CHICAGO, ILL

"NIAGARA BRAND" Genuine Double Refined Saltpetre (Nitrate of Potash) BOTH COMPLYING WITH ALL THE REQUIREMENTS OF THE B. A. I.

MANUFACTURED BY Established 1840

& RENWICK BATTELLE

How to Dry Cure Bacon With That "Distinctive" Flavor



METAL CURING BOX

It is a matter of pride with all packers to gain distinction of flavor in their dry cured bacon.

With this Brecht product, bacon can be cured with a deliciously mild and appetizing flavor rarely forgotten.

Constructed for durable service, of 12 gauge steel, galvanized. The top is of well seasoned pine, very securely braced. All joints are welded, making cleaning easy and allowing absolute sanitation.

Capacity is 560 to 625 lbs.

Write for prices



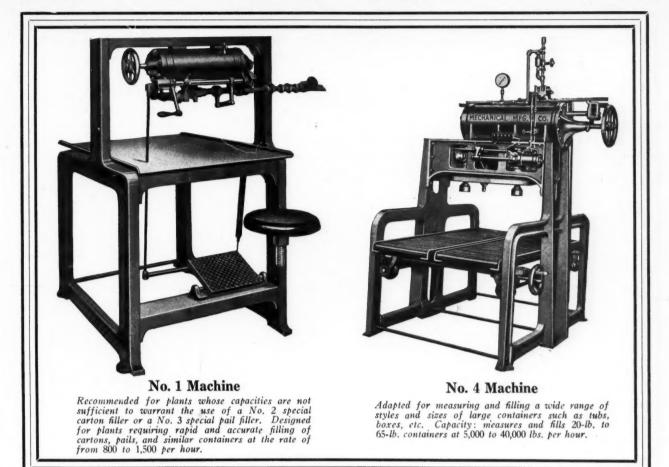
Manufacturers of Machinery and Equipment Pertaining to the Meat and Allied Industries

RRANCHES.

New York, N. Y. 174-176 Pearl St. Chicago, Ill. Monadnock Bldg. San Francisco, Cal. 67 Second St.

R. W. Bollans & Company 6 Stanley St., Liverpool, England

1853 WE KEEP FAITH 1924



Cutting Lard Filling Costs and Increasing Efficiency

Do you know that with the Harrington Automatic Machine you can measure and fill lard or compound at positively the lowest cost possible? And with absolute accuracy, speed and neatness.

It is the one machine that offers all the advantages of previous methods and eliminates their disadvantages. Measures and fills automatically as fast as the product is fed to it. No under or over fills; containers are kept entirely clean by Suction Cut-Off feature. It is the premier machine for this work.

Bear in mind, there is a Harrington machine to fill any and all requirements, regardless of whether you want to fill cartons, pails tubs or boxes. If you really want to reduce your filling room costs, then investigate this machine. Our catalog showing the standard machines with full descriptions will be gladly sent to those interested. Write for a copy.

THE MECHANICAL MANUFACTURING COMPANY

"If It's for the Packinghouse-We Make It" Pershing Road and Loomis St., CHICAGO, ILL.

Pride Washing Powder for all packing house cleaning

After each day's operations, comes cleaning-up time—a non-productive period that every packing house operator is interested in reducing to a minimum.

Pride Washing Powder eliminates wasted time, because its action on packing house greases is instantaneous. It is made to meet the heavy duty requirements presented by packing house floors, walls, utensils, and equipment.

Efficient, harmless, economical, Pride Washing Powder should have the serious consideration of every packing house superintendent.

Order a trial barrel—and do it now while the suggestion is fresh in your mind.

Swift & Company

Soap Department Chicago



The A.B.C. of Temperatures No. 1

Right Temperatures, the basis in preparing foods

If any old temperatures would do, the cooking, boiling, smoking, scalding or refrigerating problems would be easy. Any novice could do a volume business.

But the present highly technical business, or art, of preparing foods for the American table with uniform flavor, color and texture the aim, re-

quires that certain prescribed maximums and minimums of heat and cold must be attained and maintained.

This applies as well to the elementary first step of hog scalding as it does to the important process of ham boiling. If the scalding-vat water goes above 150 degrees, the result will be cooked carcasses. A maintained temperature is correct and necessary. What it should be depends on

the size of the scalding vat and the volume of killing.

Improper scalding (wrong temperatures) causes hair and bristles to break off at the roots. Result—a dark appearing carcass, fit only for second grade stock.

The right temperature is the basis of quality and maximum output in your plant.

Are your temperatures right?



Installation of 2 Honeco Temperature Controllers and 2 Columbia Recording Thermometers on Ham Cooking Vats. Plant of Adolf Gobel, Brooklyn, N. Y.

Honeco Airless Temperature Controller for Ham Vats, Steaming Tanks, Hog Scalding and Sterilizing Vats, etc.







Columbia Recording Thermometer for Ham Vats, Hog Scalding and Sterilizing Vats, Boiling Tanks, Steaming and Smoke Rooms, etc.

We are specializing on this subject for packers and have a temperature regulation plan to fit your plant.

Our experience in the Meat Products field is at your disposal.

Write for Catalog No. N-49.

American Schaeffer & Budenberg Corporation

*Boston Buffalo *Chicago Clevelan Detroit

THE SCHAEFFER & BUDENBERG AMERICAN & VALV
HOHMANN-NELSON COMPANY

AMERICAN STEAM GAUGE & VALVE MFG. CO. Philadelphia
Philadelphia
Pittsburgh
Los Angeles
Salt Lake City
Beattle

General Offices: Berry and South Fifth Streets, Brooklyn, N. Y.

*Stock carried at these branches

It is Revolutionizing Meat Grinding

The 66BUFFALO" Meat Grinder

SURELY you are interested in this marvelous machine! Every sausage maker must be interested. It's the talk of the industry. A wonder! Works almost like magic. Cuts faster than a man can feed! Guaranteed no heating of bearings! No unnecessary repair bills!

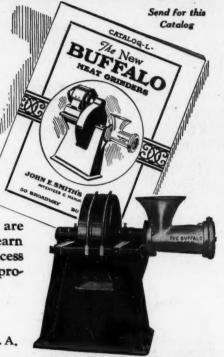
Send for this Catalog

You'll find in it the style and size grinder best suited for your needs. You'll read what men who are using it say about the new "BUFFALO." You'll learn why this machine has made such a remarkable success—cutting down running time, turning out a superior product more economically.

IOHN E. SMITH'S SONS CO.

51 Broadway

Patentees and Manufacturers
BUFFALO, N.Y., U.S. A.





Meat Loaf Pan, Made in 3 Sizes

A SUGGESTION IN FINE BUTCHERY

The Adelmann Meat Loaf Pan with yielding spring pressure, used in producing superior food products, such as tongue loaf, midget ham, roast ham, meat loaf, etc.

Products of Meat Loaf Pan

Made in three sizes

M-1 5 lbs.

M-2 8 lbs.

M-3 12 lbs.



Tongue Loaf

Midget Ham

Roast Ham

HAM BOILER CORPORATION

1762 Westchester Ave.

New York City

Represented in Great Britain by The Brecht Co., 6 Stanley Street, Liverpool, and 12 Bow Lane, London South American Representatives: The Brecht Co., Calle San Martin 335, Buenos Aires Canadian Representatives: Goold, Shapely & Muir Co., Ltd., Brantford, Ont.

QUALITY

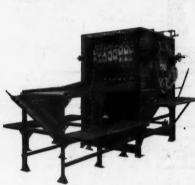
SERVICE

THE best is the cheapest in the long run." One single break-down will increase the cost of a cheap machine a great deal and repeated break-downs make its cost many times the purchase price. Realizing this we have always put the highest quality of materials and workmanship into Anco ma-

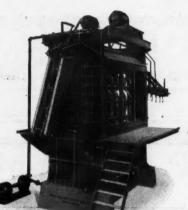


chinery and in our machine design we have always paid particular attention to durability, lubrication, and the ease of replacing worn parts.









No. 8















No. 171

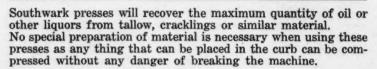
5323 So. Western Boulevard

CHICAGO, ILLINOIS

Southwark Hydraulic CURB PRESSES

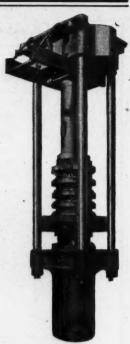
Will Extract the Liquid Content from Any Material that Can be Placed in the Curb.

No special preparation of material is necessary with these presses—



These presses can be furnished in either the two or four column types and also in the self contained style in which the pump and motor are an integral part of the machine, no other hydraulic apparatus being required.

We can make immediate shipment on the four-column type presses.



FOUR-COLUMN CURB PRESS

CLEVELAND SWETLAND BLDG.

TWO-COLUMN

CURB PRESS

434 WASHINGTON AVE. PHILADELPHIA, PA.

PHILADELPHIA.PA

CHICAGO FISHER BLDG.

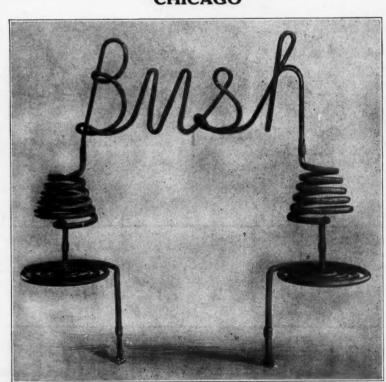
REMPE COMPANY

MANUFACTURERS OF

Ammonia Drums and Oil Traps Manifolds, Attemperators Return Bends

> Galvanized and Painted Coils a Specialty

Iron Pipe Coils and Signs



MANUFACTURERS OF

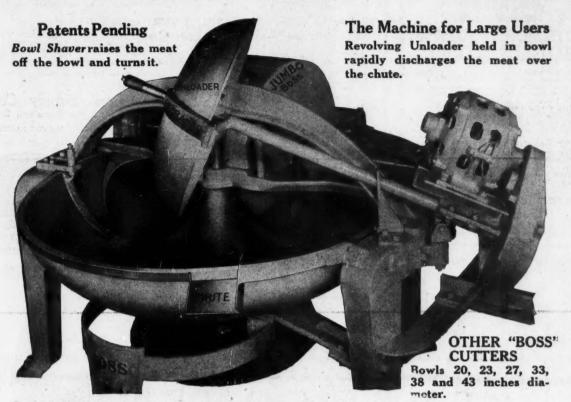
Iron Pipe Coils for Ice and Refrigerating Machines Heaters, Soap Makers, Blast Furnaces,

Coils of Any Shape or Description In Any Desired Continuous Length

Phone
Kedzie 0483 or 0400
or write
3000 Carroll Ave.

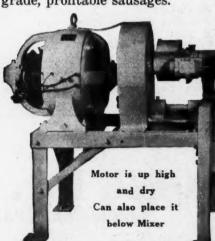
The New "Boss" Jumbo Cutter and Mixer

Cuts meat uniformly fine, turns and mixes it into High Grade Sausage Dough. When done, meat is rapidly discharged with more gainage than by any other One Machine.

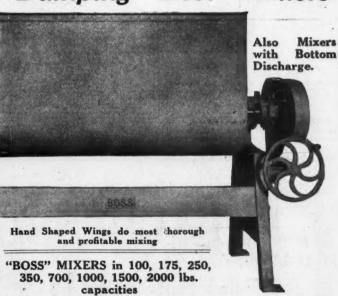


Bowl 56 in. 9 Knives. Capacity 550 lbs. Motor, 40 HP. Speed 1150. Weight 5,500 lbs.

Their Hand Shaped Wings work and mix every meat fibre until it has absorbed the added moisture to become an inseparable part of it, thus producing juicy highgrade, profitable sausages.



Dumping "Boss" Mixers



THE CINCINNATI BUTCHERS' SUPPLY CO.

CHICAGO BRANCH 3907-11 S. Halsted St.

RS

for

rs, last

0400

Killing

Manufacturers
"BOSS" Machines

Sausage Outfits Factory and Main Office 1972-2008 Central Ave. CINCINNATI, OHIO



PUTS MORE PROFIT IN SAUSAGE MAKING

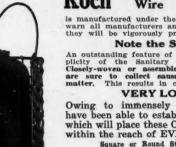
Temperature control that is positive throughout the various cooling stages of sausage making can be accomplished by Baker System Refrigeration at a phenom-

Baker System nearly continued and the quality of your product will increase and the demand for your sausage grow larger. This means more profits.

Every Baker Plant Built to Order.

Your Baker Plant is built to meet the refrigerating problems you have in your place. We invite you to submit your problem to our Board of Engineers for sulution. No obligation.

Baker Ice Machine Co. Omaha, Nebraska.



Patented Wire Sausage Form Koch

is manufactured under the Koch Patent, and we hereby warn all manufacturers and users of infringements that they will be vigorously prosecuted.

Note the Simple Hinge

An outstanding feature of the KOOH FORM is the simplicity of the Sanitary Hinge and Locking Device. Closely-woven or assembled hinges or fastening loops are sure to collect sausage meat and other foreign matter. This results in condemnations.

VERY LOW PRICES

Owing to immensely increased production we have been able to establish VERY LOW PRICES which will place these ORIGINAL KOCH FORMS within the reach of EVERY SAUSAGE MAKER.

Square or Round Styles any size or

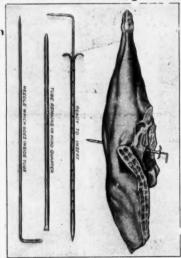
Western Butchers' Supply Co.
San Francisco, Cal.

FOR SALE BY LEADING BUTCHERS' SUPPLY HOUSES





Prevent Sour Rump Joints



(Patent Applied for) Progressive Butchers and Packers Use the BROZ JOINT AERATOR To Prevent Sour Joints, Thereby Eliminating one of the Worst Causes of Loss in the Handling of Fresh Meats. Write for information.

BROZ JOINT AERATOR

The Stockinet Smoking Process



Saves Labor Trimmings Shrinkage



Smoke Your Meats in Stockinets and Get Uniformity, Sanitation, **SQUARE** Butts and Appearance

The Ham Season is Now On

To get large sales, your Mr. Quality should have the assistance of Mr. Stockinet appearance.

Numerous Packers Throughout the Country Are Why Not You?

For Further Particulars Write or Phone

Thomas F. Keeley, Licensor

516 East 28th Street, Chicago, Ill.

Telephone Calumet 0349

If you are looking for help, refer to the Classified Advertisement page.

In Spices, too, the Best Is The Cheapest

J. K. LAUDENSLAGER, Inc.

612-14-16 W. York St.

Philadelphia, Pa.

Importers SPICES Grinders

Butchers Mills Brand

35 years reputation among packers for quality

Smoking Meats with Airoblast Produces the Best Results



Illustration of A nal Installation

Uniformity of Product Is Assured
Smoke House Costs Reduced to a Minimum

Further particulars furnished by addressing

Airoblast Corporation

3948 So. Hamilton Avenue

CHICAGO, ILL.

AIROBLAST
The Modern Method
of Smoking Meats

Geveland,

For Sale by leading butchers and

packing supply

houses and job-



Filter Presses

BEEF EXTRACT, GLUE & SOAP MANUFACTURERS

Tankage and Curb Presses

PACKING HOUSE MACHINERY AND EQUIPMENT

Write for Information and Prices William R. Perrin & Company Fisher Building Chicago, Illinois



Keeps It Fresh and Clean

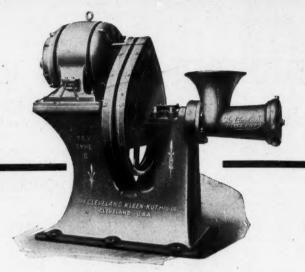
The majority of Sausage Meat packers in the United States use this attractive, snow-white woodfiber package. It protects and sells the sausage. Gains added business-increased profits. You should adopt it for greater sales volume



Send for Samples

Mono Service C.





A Super Chopper

With The Cleveland KLEEN-KUT No. 7E-X-TB You Get-

- 1. More chopper for your money.
- 2. Strong, sturdy, reliable.
- 3. Greater resistance to breakdowns.
- 4. Longer life and constant service.
- driving 5. Brute power and force.
- 6. Greater production.
- 7. More product per dollars invested.

Specifications

Model 7E-X-Type-B Plate Size 85/8"

B Meat Cutting Capacity, 8000 lbs. per hour. Size overall, 26x72 Motor 25 h. p.

The Cleveland Kleen Kut Mfg. Co.



Galvanised Sheet Steel Car

L. O. KOVEN & BROTHER 154 Ogden Avenue Jersey City, N. J.

> **Manufacturers of Special** Steel or Monel Metal Cars

> > Also

Tables Sinks Tanks Chutes Flues

and other sheet metal specialties



When you buy cans you buy men too

IT takes more than just tin plate and machinery to make containers—it takes men's energy, brains, inventiveness, enthusiasm.

It is men who interpret your order for cans, and men who fill it to your best interest. It takes men to see a new container need—to create and manufacture the new container needed.

And it is only as men wish to serve that factories and machines have power to serve

Equipment, buildings, material resources, package problems.

all these are important. But what of the men who produce your containers?

When you place your order with us a host of Canco men figuratively become your employees. These Canco men include experts in design, equipment and production. They are experienced, resourceful, earnest.

Factories can be built faster than fully qualified men can be found to operate them. The Canco organization has been long in the making. It is this organization that makes Canco Quality and Canco Service real and important factors in working out package problems.

Let a Canco representative study your container needs with you. Perhaps he—with the Canco men behind him—can show you the way to a better package—a Canco package.

American Can Company

NEW YORK

CHICAGO

SAN FRANCISCO

American Can

CONTAINERS OF TIN PLATE . BLACK IRON . GALVANIZED IRON . FIBRE





Pails &

LARD

COMPOUND

Containers of superior quality at reasonable prices for prompt shipment.

Wheeling Corrugating Company

CAN DIVISION

Wheeling

W. Va.

Columbus. Ohio

1118 Praetorean Bidg., Dallas, Texas



See page 65 for Classified advertisments

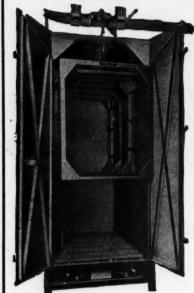
Get rid of odors

How much money do you spend in a year trying to get rid of the odors in your plant?

Have you been successful? If not, why not try the Henderson-Haggard Chlorine Process, which is installed under Positive Guarantee to

It is safe, simple, cheap.

W. J. SPRINGBORN Consulting Sanitary
15 East 40th St. Expert New York GAS-FIRED.



BRAND'S

Tracking-Smoke-House

Smoke Your Own **Meats and Sausage**

Built in sizes to smoke from 1,000 to 4,000 lbs. Frankforts per eight hour day. Cost of smoking LESS than ten cents per hundred pounds. Asbestos lined. Heats quickly. Works fast.

M. BRAND & SONS

Designers-Manufacturers First Ave. & 49th St., **NEW YORK**



Quality and Profit

in Boiling Hams

by using Arco Retainers

Our automatic flat aluminum retainers are the only ones that force the meat out automatically when removing the top cover. Spring bottom comes out with the ham without tearing the meat or skin. Made in 3 styles and 12 sizes.

Our Automatic Spring Cylinder Retainers produce perfect round hams. They press while the ham boils. Made in 10

Send for our descriptive catalog

A. Rispel & Co.

1617 N. Winchester Av. CHICAGO, ILL.

Grasso's New Table Worker

207 E. 43rd St.



eliminate odors.

GRASSO'S

"Original Holland" Margarine Machinery

Sold in America only by the

A. H. BARBER-GOODHUE CO.

CHICAGO, ILL. 316 W. Austin Ave.

Freezer and Cooler Rooms for the Meat and Provision Trade ecialists in CORK INSULATION Details and Specifications on request Morrow Insulating Co., Inc. NEW YORK

Every Season Has Its Needs

Requirements for the Summer Months

SELECTED EXTRA NARROW HOG CASINGS

(For Frankfurters)

BEEF BUNGS

(For large Bologna)

SMALL BEEF BLADDERS

(For minced Ham)

MEDIUM SHEEP CASINGS

(For Frankfurters)

NARROW SHEEP CASINGS

(For "Stand" Frankfurters)

BEEF MIDDLES

(For Bologna)

Quality and Prices right-Send us your orders now.

The Original Firm—Established 1868

S. OPPENHEIMER & CO.

96 Pearl Street NEW YORK

HAMBURG

Luisenhof 8

de

LONDON

47-53 St. John St.

2700 Wabash Avenue CHICAGO. ILL.

WELLINGTON, N. Z.

Boulcott Street

Foreign Correspondence Invited

BORCHMANN STOFFREGEN Sausage Casings

546 West 40th Street ew York - N. Y. New York

Sheep Casings Hog Casings **Beef Casings**

California By-Products Co.

IMPORTERS EXPORTERS

Main Office 2007 San Bruno Ave. 508 West 43rd St. SAN FRANCISCO NEW YORK

Phone Plaza 1212

INTERNATIONAL CASING CO.

IMPORTERS AND EXPORTERS OF

SAUSAGE CASINGS

247 EAST 56TH STREET, NEW YORK

J. LANG

18-20 Gansevoort Street, NEW YORK CITY Buyers at all times of RINGS

also
HANKS of SHEEP CASINGS for Selecting Purposes

THE AMERICAN CASING CO.

SAUSAGE CASINGS and SPICES **NEW YORK CITY**

401-3 East 68th St.

NEW YORK BUTCHERS' SUPPLY.. CO Inc. SAUSAGE CASINGS AND

SUPPLIES 513 Hudson St., NEW YORK, N. Y.

PHONE LEXINGTON 4114 Schweisheimer & Fellerman

IMPORTERS and EXPORTERS OF
Sausage Casings
Selected Hog Casings a Specialty
Ave. A, cor. 18th St. NEW YORK, N.Y.

Los Angeles Casing Co.

714-16-18 Ducommun Stre LOS ANGELES, CALIFORNIA

Sausage Casings & Supplies Tennis and Musical Strings

BECHSTEIN & CO. IMPORTERS AND CLEANERS OF SAUSAGE*CASINGS

CHICAGO: 723 West Lake Street LONDON: 5 St. Johns St., Smithfield, E. C.

NEW YORK: 50 WATER STREET Telephone No. 1251 Broad

OPPENHEIMER CASING CO.

Toronto Buenos Aires

Importers and Exporters of SAUSAGE CASINGS CHICAGO, U. S. A.

ondon Wellington

M. BRAND & SONS

SAUSAGE CASINGS

FIRST AVE. AND 49th ST.

NEW YORK

S. OPPENHEIMER & CO.

Sausage Casings

London, 47 St. John St., Sn 73 Boulcott St., Wellington

96-100 Pearl St., New York

EARLY & MOOR, Inc.

Importers SAUSAGE CASINGS 139 Blackstone Street

Exporters Boston, Mass.

M. ETTLINGER & CO., Inc.

Importers, Exporters and Cleaners of Sausage Casings. A large stock of all kinds of casings constantly on hand

12 COENTIES SLIP, NEW YORK

THE INDEPENDENT CASING & SUPPLY COMPANY 1335-1341 WEST 47th ST., CHICAGO IMPORTERS and SAUSAGE CASINGS

The Standard Casing Co., Inc.

EXPORTERS Sausage Casings IMPORTERS

513 Hudson Street Spring 9505-9506

NEW YORK

Cable Address
"Stancasing," New York

Sausage Casings HARRY LEVI & COMPANY

DRODEL CO.. THE

Import

Sausage Casings

Export

336 Johnson Ave.

Brooklyn, N. Y.

MANUFACTURERS Poultry Foods Tallow and Oils

BUYERS OF

CONSOLIDATED BY-PRODUCT CO.

West Philadelphia Stock Yards

MANUFACTURERS Beef, Sheep and Hog Casin all Descriptions

Boof Wensands a Specialty

IMPORTERS OF

High Grade Hog and S

Beef Crackling Calf Skins 30th and Race Streets

Philadelphia, Pa.

Patent Sewed Casings

have proven to be THE Casings for all kinds of Summer Sausage

We recommend

for Genoa Patent Hog Bung Ends

" Salami Patent Beef Middles

" Thuringer . . . Patent Hog Bungs

" Minced Ham | Patent Bladders and Mortadella

We make them to order in any size or quantity desired

Patent Casing Co.

Sole Licensed Manufacturers of all kinds of Sewed Casings under the Sol May Patents

617-621 W. 24th Place

Chicago, Illinois

Massachusetts Importing Company

HIGH GRADE SAUSAGE CASINGS

Direct Importers of Russian, Persian, Chinese Sheep and Hog Casings BOSTON, MASS. U. S. A. 78-80 North Street

J. H. BERG CASING CO. Sausage Casings

946 W. 33rd St.

Chicago, Ill.

AUSTRALIAN Sheep and Beef CASINGS L. A. SCANDRET

Casing Cleaners and Dried Gut Manufacturers

Sydney, Australia

99 Gold St. New York

MEAT COVERINGS

All kinds of Stockinette and Knit Bags for

BEEF

CALF

SHEEP

HOGS

Write for Samples and Prices

The Adrian Knitting Company

400-410 Water Street ADRIAN MICH.

G.Van Gelder & Co.

29 Reguliersgracht AMSTERDAM, HOLLAND HAMBURG, GERMANY 47/48 Katharinenstrasse Prime Selected

Sheep Casings

Dried Bladders and Weasands



CASINGS PRODUCE CO., Inc.

80% Pearl St. New York City

TEL. BROAD MAS

Cleaners and Importers Sheep and Hog Casings.

E. E. SCHWITZKE, Pres.

Complies with B. A. I. Requirements

The King of Nitrates

Write for Prices Immediate Deliveries

Double Refined Nitrate of Soda

The same formulas are used with Double Refined Nitrate of Soda as with Saltpeter, except that 16% less Double Refined Nitrate of Soda should be used; the reason for this being that 84 parts of nitrate of soda are equivalent to 100 parts of saltpeter

STAUFFER CHEMICAL CO. CHAUNCEY, NEW YORK

SAN FRANCISCO SALT REFINERY SAN FRANCISCO, CALIFORNIA



Protect the Product

HY-GLOSS Paraffining Process is unexcelled, is used by the leading Oleo Manufacturers of the country and attracts the attention of the discriminating

NATIONAL **Carton Company** JOLIET, ILL.

T. E. Hanley & Co. **Brokers**

Packing House Products

We specialize in

Boneless Meats, Sausage Material Boiling Hams, Provisions and Sausage Casings

YOUR INQUIRIES AND OFFERINGS SOLICITED

Office and Warehouses 40th and Packers Avenue

UNION STOCK YARDS Chicago, Ill.

Phones: Yards 1414, 1515 Codes: Cross, Bentleys

Is caused by the dirty, filthy, dangerous, disease-carrying fly. Flies are a menace to health and a nuisance to man and other animals.

The propagation of the skipper fly, as well as the house fly, can be prevented if the instructions issued by the Department of Agriculture in Bulletin No. 118, entitled, "Experiments in the Destruction of Fly Larvae in Horse Manure," are followed. Borax should be applied in markets, packing houses, stables, barns, etc. The directions issued by the Department of Agriculture for treating manure with Borax to kill fly eggs and maggots are as follows:

Apply 10 ounces of Borax to every 10 cubic feet of manure immediately upon its removal from the barn. Apply the Borax particularly around the outer edges of the pile with a flour sifter or any fine sieve, and sprinkle 2 or 3 gallons of water over the Borax-treated manure. The treatment should be repeated with each addition of fresh manure. Water should be added to garbage, street sweepings, etc., the same as in the

PACIFIC COAST BORAX CO.

New York

Chicago

San Francisco



BEEF. HAM and SHEEP BAGS

We Manufacture all kinds of Stockinette Cloth and Bags for Covering Meat

WRITE US FOR INFORMATION AND PRICES

Wynantskill Mfg. Company

TROY. N. Y.
Fred K. Higbie Supply Co., Rep., 630 N. Michigan Ave., Chicago, Ill.



Cary's Universal Box Strapping

Known the World Over as the standard for quality and strength. This Strapping is made of extra soft annealed steel of great tensile strength. Nails can be driven through it without first punching holes. The nail heads are protected, when case is moved along the floor, by the raised bosses which strengthen the edge of the strap. Every coil is equipped with our Patent Metal Hanger which makes it a complete reel that can be hung anywhere without floor space being occupied.

Made in four widths, ½, %, % and 1 inch. Put up in coils of 300 feet; 20 coils packed in a case.

Also manufacturers of corrugated fasteners and shipping room specialties.

CARY MFG. CO.
Manhattan Bridge Plaza, Brooklyn, N. Y.

PATERSON PARCHMENT PAPER

= PASSAIC, NEW JERSEY=

Why Kill 'Em

The Man-of-Heart who owns a mill
Of one thing lives in dread,
His elevator may break down
And lay his men out dead.
The Man-of-Heart may happy be,
With nerves no longer shook
He "Hooks 'er to the Biler" safe
And Grim Death gets the "hook!"

For when a bunch of Careless Men Pile on all they can stow, The "Hook 'er to the Biler" Kind Will just refuse to go. Its load of course is never more Than steam and piston make, So any schoolboy could design This kind that never break.

"Attach It to the Steam Generator"

(As the English editor said we must print it if we wanted him to accept our advertising money.)



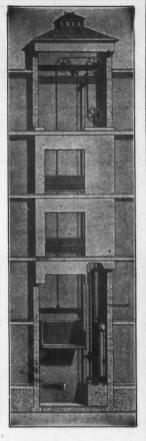
ELEVATOR MAKERS TO FOLKS WHO KNOW



Over 2000 In Daily



Double Geared





If Your Jobber Does Not Handle Them, Write Us Direct

Why Buy Baskets

Every Few Months instead of Every Few Years



Try one lot of Backus Woven Boxes and see how long they last.

You will save some real money and also the constant trouble and annoyance of ordering new baskets. You will greatly increase the efficiency of your delivery system.

A. BACKUS, JR. & SONS - - DEPT. N DETROIT, MICH.

Armour's Casings/

Uniform in Size
Absolutely Clean
Guaranteed to Pass
Government Inspection
BEEF—HOG—SHEEP
CASINGS

ARMOUR AND COMPANY
CHICAGO

7717

NATIONAL PROVISIONER

Copyright, 1924, by The National Provisioner, Inc. Title Registered in U. S. Patent Office.

OFFICIAL ORGAN OF THE INSTITUTE OF AMERICAN MEAT PACKERS AND THE AMERICAN MEAT PACKERS' TRADE AND SUPPLY ASSOCIATION

PUBLISHED EVERY SATURDAY

Entered as second-class matter at the postoffice at Chicago, Ill., under the act of March 3, 1879.

Vol. 71.

Chicago and New York, July 5, 1924.

No. 1

Packer's Remedy Rests with Producer

Overproduction Must be Discouraged or Both Producer and Packer Will Suffer — Views of an Authority

While the salesman was taking his Fourth of July vacation the discussion turned back to "What's the Matter with the Packing Business," and the packer was given a few jolts.

He was told not to blame the salesman, that it was his own fault because he bought too many hogs and paid too much for them.

This view is answered in this issue of The National Provisioner by an authority on both production and packing, whose experience and official connections make his statement of importance.

Conditions confronting the packer during the past season have been unavoidable, according to this authority.

What Makes the Hog Price?

Competition in buying hogs is what makes the price. Record hog runs had to be absorbed, and the consequent volume of product disposed of. The result was a product glut, and forced sales to get it into consumption. The job of handling the largest number of hogs ever slaughtered in a similar period, and disposing of the product to the best advantage, is the job that almost broke the packer's back.

The best guesser on future product prices—provided he did not follow competition too far, and buy his hogs regardless of price—was the packer who came out best in the long run, in spite of all the difficulties of buying, operating and selling that he was forced to face.

Operating Costs vs. Salesmanship.

In this observer's opinion, low operating costs are more important than superior salesmanship.

But the big remedy is to reduce hog production to a level with consumptive demand.

Oversupply is undesirable from the standpoint of the packer. Therefore the producer should be told that the trade will take just so much livestock and no more. If producers disregard this, they must accept the penalty in prices below cost of production.

Problem of the Packer Is to Educate Producer to Avoid Overproduction

Discussion of the packer's problem from a point of view which takes in the livestock producer, and which points to him as the source of packing difficulties, is found in the following letter from a market expert who speaks with some authority:

Editor THE NATIONAL PROVISIONER:

If it is permitted that one not directly connected with the packing industry, but-in rather close touch with it, may join the discussion of the present packing situation, the writer would like to offer the following:

In the various letters appearing in The NATIONAL PROVISIONER there seems to be rather general unanimity on one matter, the difficulty of realizing a profit from hog-killing operations.

But when it comes to pointing out the causes of this situation there is no such agreement, but rather an inclination on the part of representatives of different departments to put the blame elsewhere. The

buying department pays too much for hogs—the management seeks volume and sacrifices profit—the sales department is weak-kneed and salesmen fail to get prices which cover costs and profit.

Situation Beyond Their Control.

While there may be some truth in each of these different opinions, it seems to the writer that neither separately nor combined do they adequately explain the situation prevailing during the past several months.

This situation, in the writer's opinion, has been due to causes largely beyond the control either of departments or managements. These causes were inherent in the situation in which the industry was put, through no fault of its own, and their effects could not have been avoided by the action of individual executives, and probably not by any concerted action by an organization of executives.

The factors controlling this situation, in my opinion, can be briefly stated;

Hog and Product Glut.

1. The packing industry during the first five months of the present packing year, November 1 to April 1, has had to handle the largest number of hogs ever

slaughtered during a similar period. The inspected slaughter for the five months this year was 26,698,000 compared to 23,749,000 for the same months in 1922-23 and 23,494,000 in 1918-19.

2. It has had to distribute through domestic channels the largest volume of pork products ever distributed during this period. Although exports were somewhat larger than last year, and the average weight of hogs slaughtered somewhat smaller, these combined did not begin to offset the production from the increased slaughter.

Weak and Declining.

3. While the accumulated storage supplies on April 1 have only been exceeded during the war and post-war years of 1918, 1919 and 1920 for the same date, the actual accumulation since November 1 was less than last year, in spite of an increased slaughter of 3,000,000 hogs. The large carryover into the new packing year was a large factor in present storage stocks. Products from increased slaughter this years have gone into current consumption.

4. The distribution of this volume of products has been on a generally weak and declining market for products.

5. In order to dispose of this great

volume of products consumptive channels have been over-supplied and sales have been forced.

Hogs Had to Be Marketed.

This situation was unavoidable. The hogs were in the country and had to go to market. There was no possibility of limiting packing operations for the hogs had to be taken care of. Market supplies of the raw material hogs—and not consumptive demand for products control packing house operations.

No individual packer could improve the situation by curtailing his own operations. Resort to storage was carried at least as far as seemed safe, in view of the probable supplies of hogs during the coming spring and summer months.

In this situation there was not and could not be any fixed price on products. These had to be sold and prices had to be made that would move them.

Sales managers and salesmen under such circumstances are powerless to maintain prices, for costs have no control over products that must be sold. It has been a buvers' market.

Product Price Governs Hog Price.

The prices obtainable for products determines what will be paid for hogs; that is, the direction of price is from products to raw material. The sequence of purchase, manufacture and sale, however, is from hogs to products.

On a continuing weak and declining market it results that hogs, bought even on a 'cut-out' basis, will show a loss when the product is sold. Hedging in the provision market may lessen these losses, but cannot eliminate them.

Hog prices are set by killer competition for hogs. Current prices of products during recent months, and hoped-for prices this summer for stored supplies, determined buyers' judgments as to hog

This competitive judgment possibly did not foresee the very large marketings of hogs and the weak and declining current market for products, and did not sufficiently discount these. The future will show whether this judgment as to this summer's prices was sound or otherwise.

Reasons for Packer Success.

Packers who produce only high-quality products, and who have built up a consumers' demand for these under brand names, no doubt have been in a better position than packers who produce all qualities of products. But since only a limited percentage of hogs marketed can be made into such quality products, it has been obviously impossible to put the whole industry on a quality basis.

Hence it was, perhaps, good fortune rather than better business judgment or better salesmanship that accounted for better financial results.

Low operating costs, through efficient use of labor and equipment and low overhead are, in the long run, probably more important factors in packinghouse profits than is superior salesmanship.

Over Supply is Undesirable.

The difficulties to the packing industry involved in handling the enormous hog production of 1922 and 1923 would seem

to justify the conclusion that such an oversupply is as undesirable from the standpoint of the packer as it is from that of the hog producer; also that physical volume is a handicap when all the economies of capacity operation are more than wiped out by difficulties in merchandising.

In view of this situation, it might be desirable for the packing industry to attempt to influence more directly than it has heretofore done the volume of hog production.

> Yours very truly, MARKET OBSERVER.

Packer is to Blame If He Buys More Than He Can Possibly Sell

This packer is a skeptic. He says 90 per cent of the trouble is with the management.

No salesman on earth can sell more product than there is a market for.

It is the packer who buys hogs when he knows he'll cut them at a loss who is to blame.

It's no use to try to educate him on costs, says this packer. Every packer knows his costs in a general way.

Supply and demand given the price, and until the packer learns to base his buying on the demand, there can be no permanent remedy.

This packer writes as follows:

Editor THE NATIONAL PROVISIONER:

I see by copies of The NATIONAL PROVISIONER received during my absence that the question of "What's the Matter With the Packing Business" is still agitating the trade

ing the trade.

When I left here the hog buying seemed to be the question under consideration; now it's the salesman's shortcomings. We suppose next week it will be some other excuse.

The trouble is that the management is at fault. As about ninety per cent of the success of the packing business is in the

Short Form Hog Test

Do you know each day how your hogs "cut out"?

Do you know how to figure all operating charges and expenses so as to get at your cutting profit or loss per day or per cwt.?

THE NATIONAL PROVISIONER'S

THE NATIONAL PROVISIONER'S revised Short Form Hog Test enables you to keep track of this each day

If you want a supply of these test forms for daily figuring fill out the following and mail it at once:

The National Provisioner, Old Colony Bldg., Chicago.

Please send me copies of the Short Form Hog Test for daily figuring.

Single copies, 2c; 25 or more, 1c each; quantities, at cost.

management. We should look to this department to correct most of the present evils in the business.

If the manager orders hogs when he knows there is a loss in them, he certainly cannot blame anybody else but himself for the business showing a loss, as there is no breed of salesman that we have ever seen that could get much more than the market for product, no matter how good it was.

If the man who is managing the business continues to buy more product than there is a demand for, he must either freeze it, put it in the cellar or sacrifice it.

You will not see any permanent change for the better until packers stop buying more hogs than their trade requires, hoping for an advance to let them out.

Every packer knows in a general way what it costs him to do business, and it is wasting valuable time in trying to educate them in the matter of costs.

The supply and demand governs the price the packer gets for his product, regardless of whether he figures it costs him one price or another. A man cannot hold all the product he manufactures, and if he restricted his buying to the needs of his demand, the situation would clear up quickly.

Yours truly, VETERAN PACKER.

Make Right to Sell Right Full Yield and Quality Product Offered as Remedy

A former packinghouse foreman who has been studying conditions closely offers the following suggestion as a contribution to the "Sell Right" discussion:

Editor THE NATIONAL PROVISIONER:

I have been following your "Scll Right" campaign very closely and am very much interested.

As an ex-foreman of one of the larger packers, I have experienced all of the different criticisms that the average salesman produces, and I want to call to your attention the fact that to "sell right" we must "produce right."

I believe that there is a reason why there is a sales resistance. By sales resistance I mean the lowered price.

I really think our greatest trouble lies in the hands of the smalll packer.

Full Yield and Quality.

It is known that the pioneers in the business have given years of study to produce a FULL YIELD of product, to have that product stand out as QUALITY and at a minimum cost.

There are too many small packers operating in a haphazard manner. What is the result?

The small packer cuts loins narrow, trims them lean, and nearly every one of them cutting them short, with no regard for yield. When the salesman from the packer who does consider yield comes along, he encounters the first sales resistance.

This is where the price cutting begins. Either cut the price or cut your yield.

To cut the yield means to produce some other cut out of proportion, or increase the products that bring little money, such as lard and trimmings, that require extra handling and are a drug on the market.

We feel that if these things were taken into consideration, salesmanship would again become an art, and only those who study product and conditions could survive

Yours very truly, EX-FOREMAN. W

i-

n

t.

çe

g p-

y

te

1e

ld

16:

ıp.

r

ct

ho

of-

u-

ch

an

en-

ust

hy

re-

ies

ısi-

uce hat

t a

op-

ow.

of ard

the

mes

re-

ins.

ome

uch

xtra

ken

ould who

sur-

N.

Meat Trade Around the World

New Source of Meat and Fat Supplies Which May Turn Out to be Serious Competitor

III-Meat Supplies in Mongolia

By Dr. Jacques Maguite.

[EDITOR'S NOTE.—This is the third of a series of articles on the meat and allied industries in various parts of the world. The writer of this article is an authority on a little-known country, and his information is of special interest.]

The revolution in Russia has in many ways destroyed the economic life of the country and has, as will be readily understood, changed those factors and sources of statistics by which one gains definite and right deductions on economic matters.

But inasmuch as Siberia, in contradistinction to the other parts of Russia, is fast returning to normal conditions, and at the present moment is struggling to rise from the general chaos, and will in the near future recover, what is said here presupposes the already-established order in the presence of which economic life is reviving.

Cattle-breeding in Siberia had during the war an enormous influence on the meat markets of both capitals of Russia, Moscow and Petrograd; up to 50% of the meat consumed by the inhabitants of these cities was furnished by cattle brought from Siberia. The cattle brought from Siberia to the centers of Russia are not less important than the cattle of Southeast Russia and the Southwest region; in the future, undoubtedly, the importance of the so-called "Siberian cattle" will grow considerably by reason of the decline of cattle-breeding on the Russian steppes.

Ranges Fast Disappearing.

In all South Russia, as a result of the increase of ploughed lands, the steppes are disappearing. Corn is driving out cattle, as well as sheep. In due time, of

course, extensive steppe or range cattlebreeding will be supplanted by intensive farm culture. But this change is slow in coming and as yet can be noted only in a very few places in the central and

on the markets of European Russia. Cultural cattle-breeding gives quality meat, but it does not give meat in sufficient quantity and at prices low enough to satisfy the wants of the populace.



NOT MUCH TO LOOK AT, BUT MAKES GOOD BEEF.

This is a typical specimen of the better kind of Mongolian cattle. These animals are extremely hardy and thrive under almost impossible conditions. If properly prepared and handled, beef from these cattle is suitable for Western European consumption.

southern districts of this vast country.

But even a strong development of farm cattle-breeding cannot be expected to solve the present meat crises evidenced by the scarcity of meat and its high costs

Just as in England. France and Germany, so also in Russia, the cultural local cattle-breeding will serve for the table of only the well-to-do classes, and the masses in the big cities will have to rely and are already relying almost exclusively on imported meat products. The rapid growth of cities, the development of industries, inland and foreign trade, all this taken together raises the prices of meat, as of all other food products, and makes even European Russia dependent on the increase of imports of a corresponding character.

The importation of so-called "Siberian meat," as described above, will in the near future furnish not only 50%, but a still larger percentage of the meat brought into the capitals of Russia.

What Is "Siberian" Meat?

What is comprised in the term "Siberian" meat? I have purposely used the expression. The fact is that a considerable part of the Siberian cattle brought into Moscow and Petrograd are really Mongol cattle. Mongolian cattle are registered only at certain border points of Mongolia; and afterwards the cattlebreeders take them to fatten on the steppes of Semirechie and Semipalatinsk provinces, driving by degrees toward the Siberian railway. There, at certain stations, the cattle are taken from the road (Continued on page 42.)



PRIMITIVE SLAUGHTERING METHODS IN MONGOLIA.

Practically all the slaughter houses in Mongolia are owned and operated by Germans. Methods of slaughter and handling are very primitive.

RULING IN PACKER AUDIT CASE.

The recent order of Judge Adam C. Cliffe of the Federal District Court of Chicago in connection with the injunction brought against the Secretary of Agriculture by Swift & Company, Wilson & Co., and the Cudahy Packing Company, to prevent inspection of the books of the large packers by Department agents, is explained in detail in the following statement of counsel for one of the packers involved.

The ruling just handed down does not grant to the Secretary of Agriculture the right to examine the packers' books but merely overrules the motion of the packers to dismiss for want of jurisdiction the petition of the Government for writ of mandamus:

The order of Judge Cliffe, entered June 28th, as modified July 2nd, overrules the motion of the packers to dismiss for want of jurisdiction the petition of the Govern-ment for writ of mandamus to compel the packing companies to give the Secretary of Agriculture access to all their accounts, records and memoranda, and further gives the packers fifteen days from June 28th to file an answer.

The motion of the packers was based upon the ground that the District Courts of the United States have no power to issue the writ of mandamus in an original issue the writ of mandamus in an original case unless such power is specifically conferred by legislation and that no such power has specifically conferred by the Packers and Stock Yards Act, 1921. by the

The order of Judge Cliffe merely decides the jurisdictional question. The court will still have to decide whether the packers should be required to give the secretary the broad and full access to their books and records which he demands.

In his petition, the Secretary of Agriculture takes the position that under the Packers and Stock Yards Act, 1921, his employes are entitled to have full, complete, continuous and permanent right of access to all of the accounts, records, memoranda, correspondence, books and papers of every description of the packing companies.

The packing companies contend that the Government has no authority to make in-discriminate search through all of the records, its inquiries must be limited to cases where proceedings or investigations are pending against a packer involving charges

of unreasonable restraints of trade and unfair trade practices in interstate commerce prohibited by the law.

If Government employes have unlimited access to the books of the packing companies, as contended by the Secretary, then no one can be secure from disclosures of trade secrets and personal affairs, as to which no shadow of illegality attaches and in which the public has no legitimate in-

The Fourth Amendment to the Constitution, prohibiting unreasonable searches and seizures, was adopted for the very purpose of protecting citizens from just such excursions through their innocent papers and personal effects in the absence of judicial authority based upon proceedings charging some definite and probable violation of law and limited to such charges.

In contesting the claim of the Secretary to such unrestrained access to their private books and papers, the packing companies are simply trying to preserve the rights guaranteed to all citizens by the Constitution.

FEWER SPRING PIGS.

The June, 1924, pig survey of the Department of Agriculture shows that the flood of hog production in the corn belt that reached its high point in the spring pig crop of 1923, and began to go down in the fall of 1923, is now rapidly receding and has about reached normal level. A decrease of about 8,000,000 hogs in the spring crop in the corn belt is indicated.

The department survey is based upon reports collected by rural mail carriers

Packers' Convention

The nineteenth annual convention of the Institute of American Meat Packers will be held at Chicago, October 20, 21 and 22,

The Executive Committee of the Institute decided on place and date at its recent meeting, and President Herrick will announce convention committees at an early from 123,000 individual farms in all parts of the United States, of which 70,000 were in the corn belt.

Decrease of 20 Per Cent.

Decrease of 20 Per Cent.

A decrease of about 21 per cent in the number of sows farrowing for the country as a whole in the spring of 1924 from the spring of 1923 was shown by the survey. Because of a slight increase in the average number of pigs saved per litter this spring the reduction in the number of pigs is 20 per cent.

The number of sows bred or to be bred for fall farrow this year shows a decrease of 6 per cent from the number farrowing last fall. This indicates a probable reduction of 10 to 15 per cent in fall pigs, provided intentions as of June 1, are not modified materially by subsequent conditions.

In the corn belt the decrease in the

In the corn belt the decrease in the number of sows farrowing this spring is 20 per cent and of pigs saved 17 per cent, while the number of sows bred for fall shows a decrease of 11 per cent.

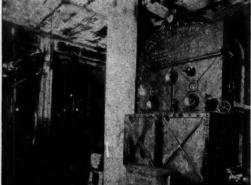
All other regions show a sharp decrease in the 1924 spring crop, although individual states in the far west show increases. In the south central region, extending from Kentucky to Texas the decrease is 36 per cent. All regions except the corn belt show more sows bred for farrow this fall than farrowed last fall.

of the eastern corn belt states, Illinois and Wisconsin show the largest decreases in sows farrowing this spring, this being about 24 per cent in each state. Of the western corn belt states, Kansas shows the western corn belt states, Kansas shows the largest reduction, amounting to 30 per cent, while Missouri shows 24 per cent, Iowa 18 per cent and Nebraska 19 per cent. In the south the most important surplus producing states show the largest decreases in sows farrowing this spring. The decrease in Kentucky amounts to 35 per cent, Tennessee 36 per cent, Oklahoma 50 per cent and in Texas 33 per cent.

Decrease In Hogs Raised.

This survey shows a production of about 32,000,000 hogs in the corn belt from the 1924 spring pig crop. This is a slight increase compared to the 31,000,000 produced from the spring crop of 1921, but a very decided decrease from the 38,000,000 of 1922. The breeding intentions for this coming fall in the corn belt indicate a probable production of about 15,000,000 hogs. This is about the same as the production from the 1921 fall crop and a substantial decrease from the fall crop of 19,000,000 in 1922, and 18,000,000 in 1923. This survey shows a production of about

Wilson & Co. Profit By Swenson Installations Why Not You?



Triple effect horizontal tube evaporator used in handling tank

Swenson installations meet every evaporating requirement of the packing-house and fertilizer plant. Our more than 30 years experience enables us to render you a real service in solving special problems. Whiting Corporation's complete manufacturing facilities are back of Swenson products.

Submit your evaporator problem to Swenson.

Bulletin E-122 on request.

Our Experiment Station at Ann Arbor is equipped to make tests, on a commercial scale (under the direc-tion of Prof. W. L. Bad ger) on problems involving evaporation, crys-tallization, heat transfer etc. at a

WENSON WAPORATOR O.

(Chicago Suburb)

e

n

lt

S

g

er

t,

nt st

ıa

ut

1e

n-ed

ry of

is

THE

NATIONAL PROVISIONER

Chicago and New York

Official Organ Institute of American Meat Packers and the American Meat Packers' Trade and Supply Association

Published Weekly by The National Provisioner, Inc.

(Incorporated Under the Laws of the State of New York)

at the Old Colony Building, 407 So. Dearborn St., Chicago
Eastern Office, 15 Park Row, New York.

OTTO V. SCHRENK, President.
PAUL I. ALDRICH, Vice-President, HUBERT CILLIS, Secretary and Treasurer.

PAUL I. ALDRICH. Editor and Manager.

GENERAL OFFICES.

Old Colony Bldg., 407 So. Dearborn st. CHICAGO, ILL.

Telephones Wabash 9742, 9743, 3751. Cable Address "Sampan," Chicago.

EASTERN OFFICES. 15 Park Row, New York. Telephone Barclay 6770.

Money due THE NATIONAL PROVISIONER should a paid to the Chicago office. Correspondence on all subjects of practical interest to our readers is cordially invited.

Subscribers should notify us by letter be-fore their subscriptions expire as to whether they wish to continue for another year, as we cannot recognize any notice to discon-tinue except by letter.

TERMS OF SUBSCRIPTION INVARIABLY IN

	WAAWE	UE,	LADIT	LUE .	LWEI	AID.			
United	States							.\$	3.06
Canada									4.06
All Fo	reign	Cou	intries	in	the	Pe	180	al	
Unior	, per y	ear.						14	5.00
Single	or Ext	ra C	opies.	eacl	1				.10
Back N									

NOTICE TO FOREIGN SUBSCRIBERS.

Subscribers to THE NATIONAL PROVISIONER foreign countries should remember that remines for subscriptions must take account of the grence in exchange, and must in every case represent \$5.00 in United States money. Compliance with is requirement will save unnecessary correspondnce.

INSTITUTE OF AMERICAN MEAT PACKERS.

INSTITUTE OF AMERICAN MEAT PACKERS.
President—Chas. E. Herrick, Brennan Packing
Company, Chicago, Illinois.
Vice Presidents—W. W. Woods, Institute of
American Ment Packers, Chicago; E. C. Merritt,
Indianapolis Abattoir Co., Indianapolis, Ind.; J. C.
Dold, Jacob Dold Packing Company, Buffalo, N. Y.;
J. J. Felin, John J. Felin & Company, Inc., Philadelphia. Pa.
Treasurer—John T. Agar, William Davies Co., Inc.,
Chicago.

delphia. Pa.
Treasurer—John T. Agar, William Davies Co., Inc., Chicago.
Chairman of Institute Plan Commission—Thos. E.
Wilson, Wilson & Company, Chicago.
Central Administrative Committee—Chas. E. Herrick, Brennan Packing Company, Chicago; T. Dos. E.
Wilson, Wilson & Company, Chicago; G. F. Swift, Jr., Swift & Company, Chicago; T. Davis Hill, Corkran-Hill & Co., Baitimore, Md.
Directors—For three years: J. E. Decker, Jacob E. Decker & Sons, Mason City, Ia.; F. S. Snyder, Batchelder & Snyder, Boston, Mass.; R. T. Keefe, Henneberry & Company, Arkansas City, Kan.; Fred Guggenheim, Guggenheim Bros., Chicago, Ill.; Myron McMillan, J. T. McMillan Company, Inc., St. Paul, Minn. For two years: J. Ogden Armour, Armour & Company, Chicago; J. A. Hawkinson, Allied Packers, Inc., Chicago; Thos. E. Wilson, Wilson & Company, Chicago; T. Davis Hill, Corkran-Hill & Co., Baltimore, Md.; T. P. Bresitn, Standard Packing Company, Inc., Los Angeles, Cal. For one year: Edward A. Cudahy, Jr., Cudahy Packing Company, Chicago; O. F. Swift, Jr., Swift & Company, Chicago; O. Scar Mayer & Co., Chicago; W. H. White, Jr., White Provision Company, Athana, Ga.; Jr. A. Wiederstein, John Hoffman's Sons Company, Chicago; O. Scar Mayer & Co., Chicago; D. Swift, Jr., Swift & Company, Chicago; O. Scar Mayer & Co., Ch

AMERICAN MEAT PACKERS TRADE AND SUPPLY

ASSOCIATION.

Vice-President—H. L. Harris, Pacific Coast Borax
b.. New York City.
Board of Governors:—H. L. Harris, Pacific Coast
orax Co., New York; J. J. Dupps, Cincinnati
atchers' Supply Co.: C. H. Harris, Pacific Coast New York City.

Ind of Governors.—H. L. Harris, Pacific Coast
Co., New York; J. J. Dupps, Cincinnati
ers' Supply Co.; C. H. Hanson, Thomson,
or Co., Chleago; W. F. Brunner, Paterson
ment Paper Co., Passaic, N. J.; W. J. Mullay,
clan Can Co., Chleago; Samuel Stretch, Van
& Co., St. Louis, Mo.; W. E. Bobson,
or Co., Chleago; Cannel Stretch,
Che Co., St. Louis, Mo.; W. E. Bobson,
org., Chleago; Walter J. Richter, W. J. Richter

Keep Up the Good Work

Standardization of effort and of quality of product has reached a high point in the packing industry, but is lacking in the other two great arms of the meat industry. except in individual cases.

Because of the great number of individuals producing livestock there is little standardization of effort or product. Each grower operates to suit himself and raises the kind and quality of livestock which best suit his conditions and his crops.

Efforts of farm organizations, pure-bred livestock associations and the government have awakened the livestock producer to some recognition of himself as only a very small cog that must be fitted into the great industrial machinery if it is to operate as it should and he is to receive an adequate return for his effort. Such rural communities as have recognized this need of standardization have been rewarded

The retailer is in something of the same position in relation to the retail meat industry as a whole that the farmer is to livestock production. He has operated as an individual, generally without regard to anything but conditions that affected his immediate business.

The retailer has known what his hams and lard and sides of beef cost him, in a general way what his overhead and family expenses were, and that his market must return to him sufficient to cover these and leave him some balance in the bank, if he was to regard himself as a success.

If the business was small, the retailer had more difficulty in getting such a return, but if it was large his overhead was automatically lessened and his returns were more satisfactory.

In the past few years a number of studies of cost accounting in retail markets have been made and each have shown interesting and most instructive results. The most outstanding of these were the Secrist studies, which are now appearing in final form in THE NATIONAL PROVISIONER.

But a continuation of these studies and a centralization of effort is desirable. The appropriation granted by Congress to the U.S. Department of Agriculture for studies of the retail meat trade, in cooperation with the National Live Stock and Meat Board, is a step in the right direction. The work should be continued from year to year until standards of operation for this great end of the meat industy are laid down. These standards should be so simple that they will form a satisfactory working basis for all retail meat dealers. the most successful of whom would approach them closest.

With standardization weak on both sides of it, the packing industry has been greatly handicapped. The more that can be done to establish national and sectional standards for the retailing of meat and for the production of livestock, the greater return will there be to all three branches of the industry. A finer finished product, marketed at a smaller cost will result, and the ultimate consumer will be encouraged to still further increase his consumption of the product.

The improvements already adopted in these two great fields have demonstrated the enormous possibilities of concentrated and continued effort.

Feeding Them Too Fast

The American public came to the rescue of livestock producers in no half-hearted fashion during the past eighteen months in the disposition of their enormous output. It is a meat loving public, and its pocketbook permitted an indulgence of its

But even such a devotee of meat draws the line when fed in quantities too ex-

Sales of fresh beef in the past few weeks have suffered the effects of a heavy hog run, accompanied by cheap pork products, and the influence of an increased percentage of idleness in the ranks of labor

Packers have found themselves facing full coolers and a continued generous cattle run. This makes a serious situation, as beef cannot be cured and stored for consumption during periods of scarcity, but must be fed regularly into the channels of trade in chilled form. Frozen beef has never found favor with the American consumer, and there is a very limited export outlet for beef products.

American packers could hardly hope to compete in an export market with beef supplied by fat steers marketed on foot at less than one-third the price of fat steers in this country. This beef is sold on the European market at less than the price of prime steers on the hoof in the principal livestock markets of the United

It would be helpful if producers could visualize the packers' problems sufficiently well to hold back either their hogs or their steers until the market is cleared up, rather than forcing excessive numbers of both into the trade.

The kind of marketing recently indulged in evidences a very poor understanding or appreciation of consumptive demand, and little regard for the producers' market agents-the packers-who are expected to make a good showing in the price paid for livestock regardless of the difficulties to be

PRACTICAL POINTS FOR THE TRAD

(Contents of THE NATIONAL PROVISIONER are copyrighted and matter on

Making Compound Lard

A small packer who is attempting to refine both lard and compound, asks the following questions:

Editor The National Provisioner:

How is cotton-seed oil made into lard? Time,

temperature, washing, mixing, deordorizing, etc.
Can tallow be deodorized with oil at a high degree of heat?

How can these two products be handled to make a neutral product? Can it be done with deodorizing tank and clay kettle only?

Which is the proper time to deodorize, before bleaching or after? How can fullers' earth flavor be extracted and yet

have proper color in compound?

What is the proper pump to use to pump compound from picker box to draw-off tank—steam or belt?

Kindly give me this information or any other permaking compound as neutral as possible.

A well-known lard-refining and compound expert answers as follows:

"In the first place, I want to make it absolutely clear that I do not approve of the manufacture of compound lard from a mixture of vegetable oil and ordinary commercial edible tallow. Most of the edible tallow which is offered contains anywhere from one and one-half to three per cent free fatty acids, and such a product is not proper for use as a shortening under any circumstances, even though it may be tolerated by the federal inspection authorities."

Refining .- Answering the first question briefly, the refining of crude cotton seed oil is usually started at 85 degrees F., adding enough caustic soda solution to neutralize the free fatty acids present with a slight excess to throw down the color and other impurities, and to provide for proper settling.

This mixture should be thoroughly mixed and then slowly heated until a definite break occurs and the soap stock becomes heavy.

Settling.—This is then allowed to settle for 8 to 14 hours, and at the end of that time the oil is decanted off from the soap stock, placed in a settling tank and heated to about 160 degrees, and again allowed to settle for 8 to 14 hours. Or else it is heated up and sprayed with hot water at about 180 degrees, the water being drawn from the bottom of the tank and the oil filtered into storage.

If possible, this oil should be allowed to settle in storage tanks for some time before using, and this is usually the case, owing to the fact that practically all of the refining is done within a few months, to take care of the oil requirements for the whole year.

Filtering.—The refined oil is mixed with fuller's earth at about 180 degrees F., and agitated violently and pumped through a filter press into storage.

Deodorizing.-This bleached oil is then ready for deodorizing. This process is done in a closed kettle with an opening in the top for exhausting the vapors. This is really a distillation process, whereby the volatile fatty acids containing the flavoring and coloring matter are distilled off, and the temperature used should depend

upon the boiling point of these volatile free fatty acids.

In general practice sufficiently high temperatures are not used, and that accounts somewhat for the fact that most compound lard is not properly deodorized.

Hardening .- After the cotton seed oil is deodorized it may be mixed with good neutral oleo stearine, or hardened oil, or else it may be partially hardened to about the consistency of lard, and the mixture run over a roll and filled into packages.

Tallow in Compound Lard.

Answering the second question: Ordinary tallow containing a relatively high percentage of free fatty acids should not be used in making compound lard. If it is mixed with cottonseed oil and deodorized at proper temperatures, it will deodorized simply in proportion to the amount of free fatty acids which are distilled over. This will properly involve the entraining of considerable oil along with the free fatty acids, and at the best, you will get a very poorly deodorized product at a considerable cost.

Neutral Product with Tallow.

Answering the third question: The only way to get a "neutral" product out of ordinary tallow is to refine it with a caustic soda solution, and this will entail a loss of about double the percentage of free fatty acids, even though the flavor will not be particularly good. By "neutral" meant the absence of free fatty acids.

Answering the fourth question: The proper time to deodorize is after bleach-

Answering the fifth question: Fullers' earth flavor is extracted by deodorizing.

Answering the sixth question: A gear pump, belt or motor driven, is the proper pump for compound. What the inquirer means by pumping from the picker box to the draw off tank is not clear. It is impractical to use a tank between the picker box and the packages in the case of compound lard, although an intermediary agitator is frequently used in the case of pure lard.

Mould in Sausage

Do you have trouble with the color of your sausage?

Does it show green rings or gray spots?

Mould IN sausage is caused by poor materials or careless handling. Mould ON sausage is a surface condition and can be prevented by proper handling.

Write to THE NATIONAL PRO-VISIONER, Old Colony Bldg., Chicago, for directions for preventing mould in sausage. Send a 2-cent stamp for the reprint on "Discoloration in Sausage."

It requires an expert to properly manufacture compound lard, and this should not be engaged in without obtaining the services of a technical man and being provided with proper means of laboratory

[An entire chapter in "The Packers' Encyclopedia" is devoted to the refining of vegetable oil and the manufacture of compound lard. Layouts of refining equipment also are shown.]

Making Chorizos

A sausage maker in West Virginia writes as follows:

Editor The National Provisioner:

Can you tell us how to make Spanish style sausage known as "chorizos"? We should like full direc-

Recipe for chorizos:

150 lbs. lean pork trimmings

50 lbs. neck bone trimmings

100 lbs. fat pork trimmings

300 lbs.

Seasoning:

12 lbs. pimento,

12 lbs. graunlated sugar,

10 lbs. 8 oz. salt

3 oz. peeled garlic,

1 lb. 2 oz. saltpetre.

Meats should be coarse cut, preferably on the rocking machine, adding spices. Then put on shelf in cooler, for 48 to 72 hours, at a temperature of 36° to 38° F.

Then stuff in medium hog casings, linked about 5 inches in each length. Then take to dry room and allow to hang there until bone dry. This product must be thoroughly dried.

For shipment and sale at a distance it is packed in tins with lard and processed through a retort. For domestic use it is ready for sale when thoroughly dried.

Color in Pork Products

The following request is from a retailer in Ohio:

Editor The National Provisioner:

Please let me know what kind of inside coloring you consider best for all pork meat food products.

Federal meat regulations do not permit the use of inside color in products made in Government-inspected establishments. They will, however, allow the use of certified color as an outside color on casings.

Before Government inspection was established, inside color was used extensively, using 5 oz. of maroon (a vegetable coloring matter) to 444 gals. of hot water. As soon as the color was fully dissolved the solution was delivered to a cooler and kept there in vats until used.

For dry sausage, 2 lbs. 1/2 oz. of maroon was added and mixed with 35 lbs. of saltpetre, and 1 oz. of this mixture contained 2 grains of color.

The safest and best procedure is to properly handle the raw meats in the chilling and curing process, and develop the natural meat color, and then use certified casing color for outside color. Then you are postively certain of complying with the pure food laws.

ie

У

lv

F. ζS, en re

ed

is

ler

ing

nit

de

its.

rtigs. vas

enble

er. red

ler on alt-

ned

the

lop

rtihen

ing

Refrigerated Counters

The following is from a small packer and retailer in the West:

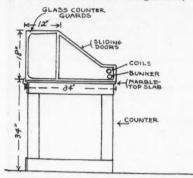
Editor The National Provisioner:

What type of display counter with regards to con-

venience and accessibility can you recommend?

We have artificial refrigeration, and at present are using marble-top counters with glass guards. These are most satisfactory from the viewpoint of service, but as they do not embody the refrigerathey do not show that is a season of the show that it is they do not show that it is they may be equipped to cover this point.

The type of counter in question can be fitted for mechanical refrigeration, or



SECTION THROUGH COUNTER. Showing method of applying refrigeration to counter equipped with glass counter guards.

for refrigeration by the use of ice, at a comparatively small expense, provided there is a manufacturer in the city where the case is located.

The illustrations given here show how

Temperatures!

Do you watch them

In the hog scalding vat? rendering kettle?

44 46

66 66 ham boiling vat?

66 66 sausage kitchen?

smoke house?

meat cooler?

tank room?

Or in a dozen other places in your plant?

If you do not, you are losing money every day.

Send a 2-cent stamp to The NATIONAL PROVISIONER, Old Colony Building, Chicago, for copies of the three articles on "Temperature Control in the Meat Plant," which appeared in recent issues. peared in recent issues.

is highly desirable, for the reason that the goods can all be seen by the customer, and can be displayed without an appearance of confusion.

In case the brine circulation system of mechanical refrigeration is being used, efficiency and economy can be had, but where direct expansion must be used in the display case it would not be so economical, though just as efficient. The loss of economy would be due to the fact that the refrigerating machine would frigerating agent, if the coil box or bunker at the rear of the case is equipped with ice pans instead of coils.

In case the direct expansion system is used in connection with brine tank in the coolers, the brine from these tanks may be circulated through these coils to the bunker of the display case by means of a small centrifugal pump, and give very satisfactory results at a very nominal cost for power for the centrifugal pump.

The case shown in the sketch can be purchased at from \$20 to \$25 per lineal foot. It is built by all standard supply

Bleaching Hog Casings

A sausage casings concern in the East asks the following question:

Editor The National Provisioner:

Please advise us of the most efficient bleaching process and medium for hog casings.

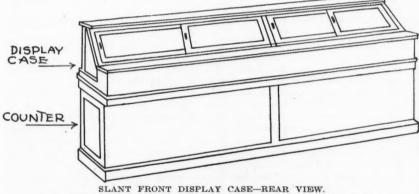
To insure a proper bleach on hog casings it is very important that the casings be carefully soaked after stripping and chilling. The soaking tierces are to be filled about three-quarters full of casings and water-one-quarter casings, the remaining two quarters water-length of time in soak about twenty-four hours, and the temperature of the soaking room always governs the temperature of water used for soaking.

The casings are then put through the cleaning machine. After cleaning, if they are not graded the same day, they must be pickled with 50° ice pickle.

They are then graded for size and put

They are then graded for size and put in separate tierces, according to size, each tirce three-quarters full—one-quarter casings and two-quarters ice pickle, 50° strength—and kept in this ice pickle for at least twelve hours to bleach.

It is not advisable to attempt to restore color to casings which have been improperly cured and show stains, etc.



Showing sliding doors and bunker for ice or mechanical refrigeration.

this may be done. These are merely rough sketches, but they give an idea of the plan. This type of display counter

have to be operated all times when the case was being used.

Cracked ice may be used as the re-

Casings handled on my Sales and Service combination bring maximum profits.

This service includes expert advice on manufacturing methods. Leading Packers are satisfied clients Write for particulars

ROY L. NEELY
Broker of Casings Exclusively 602 Webster Bldg. Webster Bldg. Chicage, Ill-Cable address "ROLESNELY"

Cut 6,000 lbs. per hour with "Enterprise" No. 1186

Here is the chopper you have been looking for—the "Enterprise" that is speeding up production, and low-ering power and labor costs in upto-date plants.

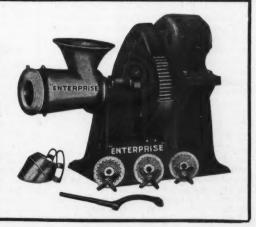
Fitted with 15 h. p. motor, it is a fast, powerful machine. Has four plates—1/8, 1/4, 3/4 and 11/2"—also three meat knives and one fat knife. Cylinder with steam jacket, if desired.

Get an improved "Enterprise"

exactly suited to your business. Remember, "Enterprise" choppers are the speediest choppers made—the only choppers with the famous "Enterprise" steel knife and steel plate cutters that have never been insieted accordingly mitated successfully.

Write for catalog of electric chop-pers, belt-driven and hand-power choppers. There is an "Enterprise" for your needs—72 sizes and styles.

The Enterprise Mfg. Co. of Pa., Philadelphia, U. S. A.



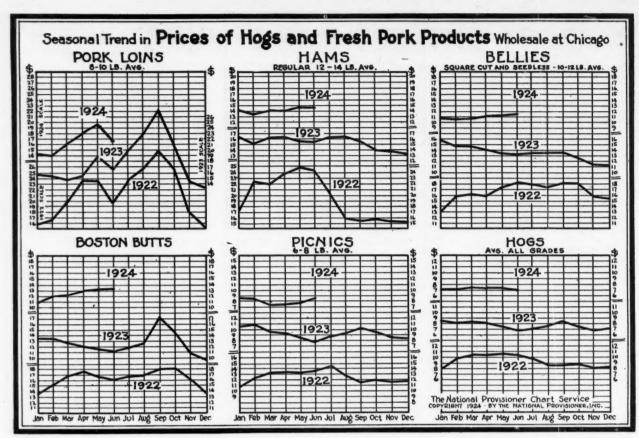


chart in THE NATIONAL PROVISIONER MARKET SERVICE series shows prices of fresh pork products for each month of date, compared to prices in the three years preceding. The graphic comparisons enable the reader to get the situation at a

The fresh pork market has held fairly steady during the month of June, with the possible exception of pork loins and, to a less extent, Boston butts.

Bellies, square cut and seedless, and green picnics were in a strong position throughout the month. The price of bellies increased fully 2c and picnics showed an increase in price and a continuous strong demand.

Due to the very heavy production, the price of fresh pork loins reached a low level the middle of the month but rallied slightly. The end of the month, however, saw the price a full 4c below that at the beginning.

Boston butts have shown some fluctuation, prices at the end of the month being 1c under those the first half of the period. Demand for this product from sausage makers an l the butcher trade is considered good.

The average price of hogs has declined slightly in the face of very heavy runs and poor quality. live price and product price promises little in the way of satisfactory returns to the packer unless the hog run is materially lightened or the price falls to a lower level.

With the exception of picnics and Boston butts, fresh pork prices compare unfavorably with those during June of last year, in spite of the fact that live hog prices were only slightly lower this year.

In June, 1922, hog prices averaged about 3c higher than this year, but product prices ranged anywhere from 3 to 10c higher than those of June, 1924.

JUNE MEAT TRADE.

Although the prices of practically all fresh meats, particularly pork loins, slumped sharply toward the end of the month just closed, traders were encouraged by a good demand for smoked meats, and an improved export situation, according to the Institute of American Meat Packers.

The demand for standard bacon and picnics, which have been wholesaling at unusually low levels, was of large proportions.

Heavy supplies of livestock, combined with the coming of warm weather, the lateness of the resort season, and the slackening industrial activities in certain parts of the country, all have their influence on the fresh meat trade, in the opinion of some observers. The result of these factors has been a very sluggish demand, relative to supply, with a consequent decline in wholesale prices.

Fresh pork loins, for example, have declined more than 20 per cent since the first of the month. Skinned shoulders and butts

also have declined somewhat. Some grades of beef showed declines of more than 10 per cent during the same period. Lamb also showed substantial declines

The export trade was somewhat irreg-ular, but showed considerable improvement, on the whole.

APRIL MEAT CONSUMPTION.

The people of the United States ate over one-half pound more meat during the month of April than in the preceeding month and in the same month last year, the total being 9.1 pounds per capita.

The principal increase was in pork, of which 5 lbs. per capita was consumed. This was .3 of a pound more than in March, 1924 and .7 more than in April, 1923.

Beef consumption increased .3 of a pound, standing at 3.7 lbs. per capita. This is .1 of a pound less than was consumed in the same month last year. There was no change in the consumption of lamb and mutton, this averaging .3 of one pound mutton, th per capita. this averaging .3 of one pound

RECORD LIVESTOCK RUNS.

At the 11 principal markets 20,449,000 hogs were received during the first six months of 1924. This is 1,108,000 more than in the same period of 1923, the previous record year.

At Chicago a run of 9,100,000 head of livestock of all kinds from January 1 to June 1, 1924, established a record when compared with any six months in history. The number of hogs received in this period totaled 5,400,000 totaled 5,400,000.

totaled 5,400,000.

For the month of June, 1924, the combined receipts of hogs at 11 markets were the largest of record for that month, totaling 3,090,000. Chicago alone received 782,-314, being the second largest of record for June at this market. Records were established at Omaha, E. St. Louis and Sioux City.

The price of hogs at Chicago has held remarkably well in face of the large supply and the quality. There was a scarcity in the runs of well finished weighty butchers and an oversupply of shortfeds and underweights.

PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces, pork and beef by the barrel or tierce and hogs by the hundredweight.

Hog Movement Large—Lard Stocks Increase — Export Movement Moderate — Hog Quality Unsatisfactory.

Prices held very steady until the early part of the week when there was some reaction in the lard market and the developments showed a quiter interest, possibly influenced by the heavy movement of hogs. For several days, the hog movement ran rather light, and this was not without considerable effect on sentiment. It exerted quite a little influence in the trade generally.

The position of the market was somewhat disappointing, as the hog movement after falling off a little while suddenly increased again. The July 1st lard stocks showed further material accumulations.

Hog Position Unsatisfactory.

For several days at the close of last week there was evidence of a lessened marketing movement in hogs, but on Tuesday the receipts were again very heavy, and the product market as well as hogs felt the effect of the movement. The position of hogs is certainly very unsatisfactory. With hogs around 7c and cash corn around \$1, there is apparent loss of approximately 40c a bushel in every bushel of corn fed, which of itself may be one explanation of the very large hog movement.

ns

of

out

en

te-

of

to

9,000

six

nore

revi-

d of

when

tory.

eriod

com-

were

782.-

d for

stab-Sioux

held

arcity

utch-

The hog-corn ratio is the most unsatisfactory now that it has been at any time in recent months. There seems to be no encouragement to look for any improvement in the ratio unless weather conditions improve so as to change ideas regarding the new corn crop, or so many hogs are marketed that there is no surplus to eat corn.

The demand for product is fairly good. Shipment from western packing points are on quite a liberal scale, but the outward movement of lard to Europe is rather disappointing. A few thousand boxes of lard are sold nearly every day, and in the aggregate possibly 10,- to 15,000,000 lbs. of lard are going out every week, but this does not seem to be enough to take the pressure off the market.

Lard Stocks Heavy.

The July 1st contract lard stocks was 75, 821,000 lbs. against 58,064,000 lbs. last month and 48,371,000 lbs. last year. Other kind, 18,181,000 lbs. against 13,191,000 lbs. last month and 14,231,000 lbs. last year. The total is 92,002,000 lbs. against 71,255,000 lbs. last month and 52,662,000 lbs. last year. The gain of 21,000,000 lbs. in the month just about reflects the smaller outward movement of lard for export.

An analysis of the production and distribution of lard for May and for five months this year compared with the same period last year shows quite a material increase in the domestic disappearance of lard as shown by the following comparison in thousands of pounds, (000 omitted):

1	924	19	023
May	5 mo.	May	5 mo.
Stocks beginning of period102,317	49,340	85,251	48,808 848,115
Production168,093	931,828	155,449	896,923
Total supply270,410	931,168	240,700	
Exports 65,479	482,329 $128,226$	95,342	498,778
Stocks end of period.128,226		84,530	84,530
Total193,705	610,555	179,872	583,308
Domestic consumpt'n 76,705	370,613	60,828	313,615

The domestic distribution for the month of May showed an increase of nearly 16,000,000 lbs. over last year and from January 1st to the end of May the consumption increased about 57,000,000 lbs. The consumption per month this year has average 74,123,000 lbs. against 62,723,000 lbs. last year.

But for the increase in domestic distribution of 57,000,000 lbs. the lard situation might have been even more depressed than it has been, as this 57,000,000 lbs. apparent increase in domestic distribution would have been just that much increased in stocks.

Hog Weights Lighter.

The weight of hogs has not been quite as good, and this is reflected into some lighter yields of product of all kinds but not enough yet to cause any apprehension as to the general, question of available supplies.

Opinions seems to differ quite a little among exporters as to the probabilities of the export movement the balance of the summer and fall. Latest reports do not indicate any change in the foreign situation as to supplies of meats and fats, yet the importing countries are getting along with smaller imports, than they did during the winter.

Bearish claims are made that some of the outward movement is made up of consignments partly due to the question of lower interest charges abroad, and the monetary costs of carrying the product. Other claims are made that shipments are being made, and financed on the basis of the present exchange rates with the idea that the working out of the reparations and the Dawes plan will bring a general hardening of all foreign exchange and make a profit in the exchange, rather than in the price of meats.

Hog Price Around 7c.

The average price of hogs the past week was only about 7c. The high price during the past five months was about 7½c, and the low price last winter about 6½c. This very narrow movement has represented the extreme ideas as to the value of hogs and product notwithstanding all the different reports regarding the smaller number of hogs in the country. These started with private estimates of last fall backed up by the January 1 Government report, and later the report on losses, and the Department's estimate of supplies based on the birth rate, and disposals of hogs since January, but the movement is still very large with apparently no signs of abating.

In view of the repeated claims of decreasing movement within a comparatively short time, the trade has begun to look upon the claims of shortage as "wolf' and practically pays no attention to the repeated assertions of a possible decrease in movement later. The outlook appears rather uncertain. If the live hog number in the country is so small as reports indicate, there should be some evidence of this in the movement very shortly. Accepting the reports as correct, the marketings will have to fall off materially, or else the reports on the supplies have not correctly represented the fact.

Daily Market Service

The DAILY MARKET SER-VICE, established to furnish the trade with authentic daily information of market prices and market transactions, is the latest addition to THE NATIONAL PROVISIONER'S trade service.

It includes market prices and transactions on provisions, lard, sausage meats, etc., together with daily hog market information, Board of Trade prices, etc. It covers export markets also.

It is mailed each day at the close of trading, and a handsome leather binder is furnished to subscribers for the purpose of filing the daily reports for ready and permanent reference. Subscribers also are entitled to free telegraphic service (messages collect).

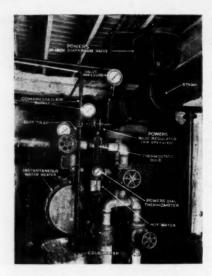
Application for this service may be made to The National Provisioner, Old Colony Bldg., Chicago, Ill. The cost is \$1 per week, or \$48 per year, payable in advance.

SEE PAGE 37 FOR LATER MARKETS.

PORK—The market was rather quiet but very steady, with mess at New York \$26@27, family \$27@28 and short clears \$20@25. At Chicago mess pork was quoted at \$23.

LARD—Domestic demand fair—export rather slow. Prices irregular. Prime western New York 11.45@11.55c, middle west 11.30@11.40c, City 11½c, refined to the continent 12¼c, South American 12¾c, Brazil kegs 13¾c, compound 12½@12¾c. At Chicago regular lard in round lots was quoted at July price, loose lard at .85 under July, leaf lard at .97½ under July.

BEEF—The market was dull but steady with mess at New York \$16@17, packet \$17@18, family \$19@0; extra India mess \$31@33, No. 1 canned corn beef \$2.35, No. 2, \$4.; pickled tongues \$55@65 per bbl. nominal.



POWERS Temperature Regulator applied to Instantaneous Water Heater in a big Chicago packing plant. Water temperature never varies more than 2° above or below the point desired.

Overheated Water Wastes Money

Water too hot not only wastes fuel, but often spoils the product.

In killing operations, or other places where large volumes of hot water at accurate temperatures are required, it is sheer waste to depend on the carelessness and guesswork of hand control.

Accurate Control costs only a few cents a day

At this small cost you can well afford to investigate the money-saving value of a Powers temperature regulator on your Water Heaters. It will pay you big dividends for 10 to 15 years.

Coupon brings full particulars. Will you mail it now?



I	
1	POWERS REGULATOR CO.,
	2725 Greenview Ave., Chicago.
1	Kindly send me information, prices, and your 30-day free test offer on Temperature Regulator for
-	□Roof Tank Heater □Instantaneous Heater □Booster Heater
1	Name
1	Address

EUROPEAN MEAT TRADE IN MAY.

All lines of the meat trade of Belgium were reported dull during May with a seasonal slump in frozen beef and generally poor demand for pork products, reports Special Representative H. B. Smith, London, England, to the Department of Commerce.

The Scandinavian demand for American packing house products is still poor. This is due partly to a seasonal movement aggravated somewhat by the long drawn out labor conflict in Norway, where 70,000 workers have been out of work for some time, affecting a buying population of around 200,000 people.

In Sweden domestic production of bacon and lard has increased. Prices for first class domestic pork are reported to be about 10 per cent under the price of American salt meats. This reverses the normal situation. The Danish market for American packing house products, which with the exception of lard is never large, is also unusually dull.

Something in the nature of a crisis has developed in the Danish pork product industry, due to overproduction during the past eighteen months. Prices are now about ten shillings per centnar under last year's average, and it is stated that farmers are hardly able to make heg raising pay. Danish authorities have recently issued a statement to the effect that this year's breeding of pigs will be some 20 per cent under last year.

TO STUDY EUROPEAN MARKETS.

A study of the marketing of American and competing meat products and vegetable oils in Europe will be made by John E. Wrenn, specialist in the foodstuffs division of the U. S. Department of Commerce. Mr. Wrenn, who sailed July 4, will cover all important countries of western Europe in his investigations, which will require a period of four months. The chief subjects for investigation will be marketing facilities and methods, production and transportation distribution costs, trade regulations, etc.

EXPORTS OF PROVISIONS.

Exports of provisions from Atlantic and Gulf ports for the week ending June 28, with comparisons:

PORK, BBLS.

	Week ended Ju 28, 1924	ne ended Ju	Nov. 1, 1923 ne to June 28, 1924.
United Kingdom	81	100	
Continent		570	14,607
West Indies	128	762	13,369
Total	209	1,432	30,131
	ON & HAM		
United Kingdom		12,302,340	354,064,950
Continent	1,188,250	3,644,500	210,707,975
So. & Cent. Amer.	*******		415,500
West Indies	3,000	********	584,000
Other countries		40,000	1,762,000
Total	12,408,500	15,986,840	567,534,425
	LARD, LI		
United Kingdom	3,988,445	5,347,400	172,743,808
Continent	3,402,824	3,408,030	396,905,667
So. & Cent. Amer.	169,544		3,631,678
West Indies	39,568	50,000	2,895,564
Other countries		9,800	185,736
Total	7,600,381	8,815,270	576,362,453
RECAPITULATION			EXPORTS.
	Pork,		
From-	lbs.	hams, lbs.	Lard, lhs.
New York		5,327,500	4,598,381
Boston		******	300,000
Baltimore		******	38,000
New Orleans		2 222 222	129,000
Montreal		7,081,000	2,535,000
Total week		12,408,500	7,600,381
Previous week		8,310,500	10,760,056
Two week ago		13,129,000	13,027,939
Cor. week, 1923 Comparative summ	nary of ag	15,986,840 gregate expo	8,815,270 orts in lbs.,
	to June		
	4. 1922-192		
	00 7,581,6		. 1,555,400
Bacon and			
Hams, lbs. 567, 534, 42	5 528 200 R	04 20 134 62	1
Lard. lbs. 576,362,45			

DEATH OF N. T. BLACKWELL.

The death occurred in Rochester, Minn., on June 15, of N. T. Blackwell, well-known in the cotton oil trade, and editor and manager of the Cotton and Cotton Oil News. Mr. Blackwell's death came as a shock to the trade, in which he had been prominent for many years.

His death was caused by swallowing a peach stone, which lodged in his throat for six weeks. Mr. Blackwell had gone to Rochester, Minn., to have the stone removed, but in his weakened condition he could not recover. He was 58 years old and is survived by his widow, two daughters and two sons.

CALIFORNIA LAMB SHIPMENTS.

Owing to foot and mouth disease quarantine restrictions, California was unable to ship live lambs to eastern markets during recent months. Therefore the bulk of the supply was slaughtered and shipped in that form

According to railroad reports, 310 carloads, containing 191,269 carcasses were shipped out of California. The bulk of these came from San Francisco.

NEW YORK MEAT SUPPLIES.

Receipts of western dressed meats and local slaughter under federal inspection for New York City, N. Y., are officially reported for the week ending June 28, 1924, with comparisons, as follows:

Western dressed meats:	Week ending June 28.	Previous week.	Cor. week 1923
Steers, carcasess Cows, carcasses Bulls, carcasses Yeal, carcasses Hogs and pigs Lambs, carcasses Mutton, carcasses Beef cuts, lbs. Pork cuts, lbs. 1	$9,290\frac{1}{2}$ $1,075\frac{1}{2}$ 227 $11,725$ 8 $23,654$ $5,398$ $196,219$ $395,319$		7,310 630 171 10,498 298 20,179 3,683
* Not reported.			
Local slaughters:			
Cattle	8,764 14,465 40,654 33,138	9,870 16,597 44,139 40,619	8,537 14,378 39,902 40,496

BOSTON MEAT SUPPLIES.

Receipts of western dressed meats and slaughter under federal and city inspection at Boston, Mass., are officially reported as follows for the week ending June 28, 1924, with comparisons:

Western	dressed	meats:	Week ending June 28.	Previous week.	Cor. week 1923.
Steers, Cows, Bulls, Veals, Lambs, Mutton Pork,	carcasse carcasse carcasse carcass	98989898988	1,892 16,729 519	2,958 969 42 909 13,044 859 548,676	2,717 552 44 1,012 10,750 260 143,070
Local sla	aughters.				
Cattle Calves Hogs Sheep			2,078 24,403	1,557 2,626 16,749 4,733	$^{1,118}_{2,110}_{21,152}_{8,226}$

PHILADELPHIA MEAT SUPPLIES.

Receipts of western dressed meats and local slaughter under city and federal inspection at Philadelphia, Pa., are officially reported as follows for the week ending June 28, 1924

June 28, 1924.			
Western dressed m ats:	Week ending June 28.	Previous week	Cor. week 1923.
Steers, carcasses	3.171	8.677	2,839
Cows, carcasses	419	748	241
Bulls, carcasses	357	203	163
Veal. carcasses	2.497	2.447	1,724
Lambs, carcasses	7.732	8,679	6,759
Mutton, carcasses	1.894	1.731	1.146
Pork, 1bs		399,182	283,423
Local slaughters:			
Cattle	1.876	2.010	2,142
Calves	2,497	3.128	2,737
Hogs	15,426	17.054	16,609
Sheep	3,726	5,998	5,822

n., 11_ or

)il

en

at

to

ld

h-

ie

ır-

of

in

nd

on

2**8**,

nd

ec-

ng

ES.

nd

ing

or. reek 923.

TALLOW, STEARINE, GREASE AND SOAP

WEEKLY REVIEW

TALLOW-The market for tallow the past week has been moderately active and stronger, with offerings more firmly held. while buyers were inclined to hold off, for the time being. The undertone in all greases, however, continued to show strength and it was felt probable that soap manufacturers would shortly be in the market again, while many contended that the next round lot business would possibly be at better prices.

Competitive greases are being watched closely, but, nevertheless, there are many shrewd observers who feel that tallow at the present levels is still comparatively cheap. In the west, a fairly good demand has been reported with offerings rather limited, with a particularly good demand for choice white grease, especially for ex-

The western market reported sales of choice white grease at 9c c.a.f. New York, first week July shipment, but prices are now firmly held. At Liverpool Australian tallow was unchanged for the week with fine at 44s 3d, and good mixed at 42s and

At the London auction, 1,147 casks were offered, 705 sold. Prices unchanged to

At the London auction, 1,147 casks were offered, 705 sold. Prices unchanged to be lower.

At New York special loose was quoted at 7@7½c, extra at 7½@7½c, and edible 8½@8½c. At Chicago prime packer was 7½@75½c, fancy 7¾@8c, edible 9½c, and choice quite 7½@8c.

STEARINE—A scarcity of offerings and a scattered demand, partly domestic, and partly felt to reflect export business, has brought about another advance of about a cent a pound in a week for the market for oleo stearine at New York, with sales reported as high as 12c, and with the market quoted 12½c asked. Offerings on the advance were very light. At Chicago demand was fair and the market quoted at 10¾@11c.

OLEO OIL—A firmer tone, but a moderate demand, featured the market. Offerings were well held, and the strength elsewhere appeared to be helping the market. At New York extra was quoted at 13½c, medium 11½c, lower grades 10½c. At Chicago extra was quoted at 12½@13c.

SEE PAGE 37 FOR LATER MARKETS.

OIL-The market has ruled frmer, with the strength in raw materials, and with a steady but moderate consuming demand. At New York edible was quoted at 13¼c, extra winter 11¾; extra No. 1 at 10¾c, No. 1 at 10¼c, and No. 2

No. 1 at 103/4c, No. 1 at 101/4c, and No. 1 at 103/4c, No. 1 at 101/4c, and at 93/4c.

NEATSFOOT OIL—A better demand has been in evidence, and the market was very steady, while offerings on the whole were lighter. At New York pure was quoted at 15c, extra at 103/4c, No. 1 at 101/4c, and cold pressed at 191/4c.

GREASES—A more active demand and a stronger market was noted in greases; offerings were moderate on the upturns, and the market in general showed a hardening tendency. The continued strength

and the market in general showed a hardening tendency. The continued strength in other greases has been a helpful factor, and sentiment on the whole appears to be more optimistic. The larger consumers, however, are slow in following bulges. At New York yellow was quoted at 65/26/63/4c, choice house at 65/3c, A White at 71/3c, B White at 71/3c, while choice white sold at 91/3c, with that price asked. At Chicago choice white grease was 71/3c, A White 7c, B White 65/26/3c, yellow 6/2/3c, house 6c, and brown 51/26/34c.

CHEMICALS AND SOAP SUPPLIES.

(Special Report to The National Provisioner.)

New York, July 2, 1924.-Latest quotations on chemicals and soapmakers supplies:

Seventy-six per cent caustic soda, \$3.76 @3.91 per cwt.; 98 per cent powdered caustic soda, \$4.16@4.45 per cwt.; 58 per cent carbonate of soda, \$2.04@2.10 per cwt.

Clarified palm oil in casks 2,000 lbs., 7½ @734c lb.; olive oil foots, 9½@10c lb.; East India Cochin cocoanut oil, 13½@14c lb.; Cochin grade cocoanut oil, domestic, 10¾@11c lb.; Ceylon grade cocoanut oil, 024@10c lb. 97%@10c lb. Prime su

9%@10c lb.
Prime summer yellow cottonseed oil, 113/4@12½c lb.; soya bean oil, 12¼@12½c lb.; linseed oil, 94@97c gal.; peanut oil in barrels, New York, deodorized, 15½@16c lb.; red oil, 8@8½c lb.
Extra tallow, f.o.b. seller's plant, 7¼@ 7½c lb.; dynamite glycerine, nominal, 16½c lb.; saponified glycerine, nominal, 12¼c lb.; crude soap glycerine, nominal, 10½c lb.; chemically pure glycerine, nominal, 16¼c lb.; prime packers grease, nominal, 6%@7c lb.

EASTERN FERTILIZER MARKETS.

(Special Report to The National Provisioner.)
New York, July 2, 1924.—Business is a little quiet this week in fertilizer materials and no sales of local tankage have been reported. Prices however are holding firm due to the fact that there is very little of this material for sale.

A few cars of blood were sold at \$3.00 per unit basis f.o.b. New York and there is more to be had at the same price.

The Chesapeake Bay fishermen report a very light catch of fish up to date and they are holding the unground fish scrap at \$3.25 and 10c f.o.b. fish factory but the buyers are not willing to pay that figure as yet, because they consider it out of line with other ammoniates.

Quite a large tonnage of cracklings were sold during the past week.

sold during the past week.

LARD AND GREASE EXPORTS.

Exports of lard from New York, June 1 to June 30, were 24,379,938 lbs.; tallow, 80,000 lbs.; greases, 3,552,700 lbs.; stearine, 289,600 lbs.

Packinghouse By-Products Markets

Blood.

Chicago, July 2, 1924.
The blood market is quiet. Sales have been reported at \$3.25. Some producers now asking up to \$3.70.

Digester Hog Tankage Materials.

The market for digester hog tankage materials is in a lull. Producers are fairly well cleaned up, and buyers are not so actively interested.

				Ammonia.
Ground, 10) to 12%,	ammonia	 8	3.25@3.35
Unground,	10 to 129	ammonia	 	3.00@3.15
Unground,	7 to 9%,	ammonia	 	2.65@2.90
-	. ***	-	 	

Fertilizer Tankage Materials.

This market is quiet. A little interest is shown in the low grades, but buyers are not interested in higher grades, as they claim prices are too high.

they claim prices are too mgn.	
Unit amn	ionia
High grade, ground, 10-12%, ammonia\$2.606	
Lower grade, ground, 6-9%, ammonia 2.356	22.5
Medium to high grade, unground 1.856	@2.2
Low grade and country rend., unground 1.500	@1.7
Hoof meal 2.256	22.3
Grinding hoofs, pigs toes, dry25.00@	30.0

Bone Meals.

The bone meals market is seasonably

•																	99					
Raw bon	e meal																		to			
Steamed,	ground	 Ĭ	ï	•		ľ	ľ	ľ	•	ï	•	1	•			•	. 4	0.0	00%	22	0	á
Steamed,																						
				_ `																		

Cracklings.

The cracklings market is steady. Supplies are limited in the middle west, and some western buyers have gone into the east to get supplies.

Pork, according to grease and quality...\$45.00@55.00 Beef, according to grease and quality... 30.00@40.00

Bones, Horns and Hoofs. The market on bones is not so active. The horn market is steady, while the hoof market is a little easier.

market is a metic casier.	
Horns, unassorted\$	
	25.00@ 28.00
Hoofs, unassorted	
Round shin bones, unassorted	
Flat shin bones, unassorted	
Thigh bones, unassorted	45.00@50.00

Glue and Gelatin Stock.

Jaws, skulls and knuckles reported sold at \$29.00, which is a dollar lower than pre-

vious quotations. Junk bones, \$24.00. Sinews and pizzles are quoted at \$20.00 last paid.

	Per ton.
Calf stock	 .\$28.00@29.50
Edible pig skin strips	 . 60.00@65.00
Rejected manufacturing bones	
Horn piths	
Cattle jaws, skulls and knuckles	 . 27.00@29.00
Junk and hotel kitchen bones	 . 22.00@24.00
Sinews, pizzles and hide trimmings .	 . 16.00@18.00

Animal Hair.

There is not much hog hair around and the market is steady. Recent quotations follow, delivered, Chicago basis:

lonow, denv	rereu,	Cilica	80 00	1919.	
Field and coil	dried,	lb			21/2@ 3c
Processed, 1b.					6 @ 71/sc
Dyed					6%@ 8%c
Cuttle switches	(110 f	or 100)	each.		2 @ 3c
Horse tails, ea	ch			3	0 @35c
Horse mane ha	ur, gre	en, lb			8 @ 81/20
Unwashed dry	horse n	nane hai	r. 1b	1	2%@13%c

Pig Skin Strips.

There is little demand for pig skin strips. Sellers have asked 4½c per lb., basis Chicago, while buyers are offering around 3½c for No. 1 tanning grades, and a little trading has developed at 3 to 3½c for Nos. 2 and 3.

F. C. ROGERS BROKER **Provisions**

Philadelphia Office: 267 North Front Street Trenton, N. J.

Frost-Richie Building State & Warren Streets

New York Office: 431 West 14th Street

COTTON OIL SITUATION

An analysis of the cottonseed oil situation for the months of August, September, October, November, December, 1923, and January, February, March, April and May, 1924, with comparisons for last season, made by Aspegren & Co., is as follows

MOVEMENT OF COTTONSEED AT CRUDE OIL

																							,	-Tons re	ceived
On hand	1	h	0	o	61	n i	n					0	e			10	- 00							1923-24. 12.786	1922-23.
		*							*	*		*				*		*						159,218	100,470
September	7							ж.	* 1								16				. ,	٠.,		547,624	674,766
October .																								963,464	971.047
November																								674.262	701.862
December																									369,981
January														ì											202,808
February																									92,029
March												_				Ĭ.		ľ	Ī					82,353	51,865
April																									18,383
May																									24,822
m-4-1																							-	200 000	
Total .	0		0			0					a	0	0	0	0	a	0		0				3	,299,830	3,221,201
																							_	-Tons cr	ushed
																								1923-24.	1922-23.

													-	_	-Tons cr	ushed-
															1923-24.	1922-23.
August .	٠								۰						52,453	52,245
September															247.845	327.096
October .																596,871
November																607.388
December																453,140
January																464.980
February																314.684
March																202.858
April																110.957
May																62,676

Total	
Estimated seed receipts at crude mills season 1923-243,372,783 On hand beginning of season 12,786	3,245,80° 13,168
Total 3,885.569 Of which is so far crushed 3,226,257 Destroyed at mills 7,446 Seed on hand 66,127 Seed still to be received 85.739	3,258,975 3,192,895 4,633 23,675 37,774

66,127 tons seed on hand at 295 lbs. crude oil per ton is equivalent to 19,507,465 lbs. crude oil which at 10% refining loss, equals 17,556,718 lbs. refined oil, or 43,802 barrels.

85,739 tons seed still to be received at 295 tons seed still to be received at 295 ton is equivalent to 25,293,005 crude oil, which at 10% refining loss, equals 763,704 lbs. refined oil, or 56,909 barrels. †Actual tons.

MOVEMENT OF CRUDE OIL AT CRUDE OIL MILLS.

		Pounds 1923-24	produced- 1922-23
On hand	beginning of	season. 2.900.209	8,475,712
			14,303,208
		70,057,576	
		192,534,145	180,780,606
November		181,193,650	184.612.023
December		128,121,983	139,525,004
		121,147,590	143,943,798
February		100,188,797	100,551,142
		68,886,485	62,726,262
			39,124,502
May		32,735,675	20,592,269
Total .		957,334,599	986,249,571
		Chi	oments-
		1923-24.	1922-23.
Angust		13,251,586	12.614.150
			65,795,898

September						٠						٠			55	.1	301	Ð,	15	28								98
October .	 		 	 			 							.1	48		6	3,	26	38								14
November														.1	137		258	3.	46	37	3	6	8	.4	7	6.	1	71
December								ì		ì				.1	29	. 8	48	8.	61	19	1	5	1	.1	9	6.	3	96
January .														.1	14	. 1	114	£,	80	77								64
February					,									.1	03.		36	8.	74	10	1	0	0	,2	5	0,	4	72
March		ì													84	.1	9:	3.	6	88		9	0	.0	2	8.	8	98
April								Ī	ū	ï					77.	.1	158	R.	51	16		5	5	.4	2	7.	4	08
May												٠			52.	2	94	ŧ,	31	3		2	9,	,3	8	5,	20	02
																_	_	_	_		-	-	-	_		_	-	-

May		
Total	917,129,10	2 971,852,978
DISTRIBUTION CRUDE	OIL HO	LDINGS.
Au	Pounds.	Aug. 31,1923. Pounds.
At mills	2,900,209	4,113,065
At refineries	1,032,229	
consumers	1,170,910	2,644,060
Total	5,103,348	7,430,655
Sept	. 30, 1923.	Oct. 31, 1923.
At mills 1	8,361,513	62,132,390
At refineries	3,148,615	7,150,449
In transit to refineries and consumers	2,947,080	24,575,260
Total 3	4,457,208	93,858,099
Nov	30, 1923.	Dec. 31, 1923.
At mills10	6,067,578	104,340.937
At refineries	9,977,978	10,243,489
In transit to refineries and consumers 2	3,716,980	26,278,750
Total18	9,762,531	140,863,176
	31, 1924.	Feb. 29, 1924.
At mills	0.573.720	107.025.777
At refinerles	5 428 981	7,092,424
In transit to refineries and	0, 220,002	.,,
consumers		14,399,798
Total13	6,347,611	128,517,999
Mar.	31, 1924.	April 30, 1924.
At mills	1,718,604	59,764,135
At refineries	7,665,026	5,757,211
In transit to refineries and consumers	0,781,830	7,590,515

Total110,115,460

At mills	. 5,512,442
Total	loss, equals

CRUSH DED MON

CARODA LEM LOIL.
During August 52,453 tons seed produced 14,464,442
lbs. crude oil, equivalent to 275.7 lbs per ton, or
13.8%, compared to 13.7% last year.
During September 247,845 tons seed produced 70,-
057,576 lbs. crude oil, equivalent to 282.7 lbs. per
ton, or 14.1%, compared to 14.8% last year.

During September 247,845 tons seed produced 70,507,576 lbs. crude oil, equivalent to 282.7 lbs. per
ton, or 14.1%, compared to 14.8% last year.

During October 650,709 tons seed produced 192,534,445 lbs. crude oil, equivalent to 295.9 lbs. per
ton, or 14.8%, compared to 15.1% last year.

During 14.8%, compared to 15.1% last year.

During December 432,823 tons seed produced 128,121,983 lbs. crude, equivalent to 296.2 lbs. per
ton, or 14.8%, compared to 15.2% last year.

During December 432,823 tons seed produced 128,121,983 lbs. crude, equivalent to 296.9 lbs. per ton,
or 14.8%, compared to 15.4% last year.

During January 408,062 tons seed produced 101,188,797 lbs. crude oil, equivalent to 296.3 lbs. per ton,
or 14.8%, compared to 15.5% last year.

During February 338,077 tons seed produced 100,188,797 lbs. crude oil, equivalent to 296.3 lbs. per
ton, or 14.5%, compared to 16.0% last year.

During March 235,498 tons seed produced 68,886,485 lbs. crude oil, equivalent to 294.4 lbs. per ton,
or 14.7%, compared to 15.5% last year.

During April 147,297 tons seed produced 32,735,675
lbs. crude oil, equivalent to 316.7 lbs. per ton,
or 15.3%, compared to 16.4% last year.

During May 103,369 tons seed produced 32,735,675
lbs. crude oil, equivalent to 316.7 lbs. per ton, or
15.8%, compared to 16.4% last year.

During May 103,369 tons seed produced 32,435,675
lbs. crude oil, equivalent to 316.7 lbs. per ton, or
15.8%, compared to 18.4% last year.

CONSUMPTION OF CRUDE OIL AS CRUDE OIL.

March. Pounds.	April. Pounds.	May. Pounds.
1,032,229	1,032,229	1,032,229
1,170,910	1,170,910	1,170,910
37,776.273	864.834,789	917,129,102
89,979,412 1,807,068	867,037,928 827,179,020	919,332,241 882,416,445
8,172,344	39,858,908	36,915,796
8,396,856	13,347,726	12,127,752
9,775,488	26,511,182	24,788,044
0,658,547	22,049.413	22,910,343
	Pounds. 1,032,229 1,170,910 37,776.273 39,979,412 11,807,068 8,172,344 8,396,856 9,775,488	Pounds. Pounds. 1,032,229 1,170,910 1,170,910 1,170,910 97,776,273 864.834.789 8,979,412 867,037,928 11,807,068 827,179,020 8,172,344 39,858,908 8,396,856 13,347,726 9,775,488 26,511,182

Consumed in U. S. A. as crude..... 9,116,941 4,461,769 1,877,701 REFINED OIL.

	I ounus	produced
	1923-24.	1922-23.
On hand beginning of season	.138.112.489	163.851.360
August	. 11,797,524	10,642,725
September	. 40,385,188	39,729,266
October	.122.016.977	125,589,446
November	.114,028,994	143,092,615
December	.107.854.566	129,740,235
January	.110.347.051	147,478,393
February	. 90,266,409	104,657,671
March		78,137,669
Anril		56.516.047
May	. 49,673,010	38,671,035
Total	.935,803,856	1,038,106,462
	-Delivered of	consumers-
August	. 81,153,066	67,651,075

August											
September											67.560,203 91.708.896
October											
November											. 87,464,855 105,230,838
											. 58,063,999 77,370,561
											81,379,919 97,078,689
February											
March											
April											
May											
Total					۰		۰				. 741,345,525 815,278,668

DISTRIBUTION REFINED OIL HOLDINGS.

Aug. 1, 1923. Aug. 31, 1923.

At refineries		60,096,969 3,376,270 5,283,708
Total	137,997,813	68,756,947
8	ept. 30, 1923.	Oct. 31, 1923.
At refineries		57,352,037 7,070,728 6,185,129
Total	41,581,932	70,607,894
1	Nov. 80, 1923.	Dec. 31,1923.
At refineries	86,598,169 6,820,437 3,753,427	133,687,108 9,135,732 4,139,760
Total	97,172,033	146,962,600
	an. 31, 1924.	Feb. 29, 1924.
At refineries	157,717,802 8,974,655 9,237,275	193,063,783 8,757,657 3,256,512
Total	175.929.732	205,077,952

	Mar. 31, 1924	April 30, 1924.
fineries		202,952,485
her places	7,873,595	8,640,165

Total	 215,062,233	216,427,193
		May 31, 1924. Pounds.

In transit from refineries 3,831,063

AVERAGE REFINING LOSS.

AVERAGE REFINING LOSS.

During August 12.812,789 lbs, crude oil yielded 11,-797,524 lbs, refined oil—7.92% loss compared to 10.81% loss last year.

During September 43,776,984 lbs. crude oil yielded 40,385,188 lbs. refined oil—7.75% loss compared to 9.68% loss last year.

During October 133,397,717 lbs. crude oil yielded 122,016,977 lbs. refined oil—8.53% loss compared to 7.01% loss last year.

During November 125,494,437 lbs. crude oil yielded 14,023,994 lbs. refined oil—0.14% loss compared to 0.58% loss last year.

During December 118,434,339 lbs. crude oil yielded 107,834,566 lbs. refined oil—8.36% loss compared to 7.02% loss last year.

During January 123,320,731 lbs. crude oil yielded 10,347,051 lbs. refined oil—10.52% loss compared to 7.05% loss last year.

During February 101,049,998 lbs. crude oil yielded 90,266,469 lbs. refined oil—10.67% loss compared to 7.05% loss last year.

During March 85,520,073 lbs. crude oil yielded 7.33% loss last year.

During March 85,520,073 lbs. crude oil yielded 7.35% loss last year.

During March 83,51,52 lbs. crude oil yielded 7.35% loss last year.

During March 83,51,52 lbs. crude oil yielded 76,-357 lbs. refined oil—10.41% loss compared to 6.67% loss last year.

During Mary 55,237,425 lbs. crude oil yielded 49,-673,010 lbs. refined oil—10.07% loss compared to 10 refined oil—9.62% loss compared to 7.42% loss last year.

Total 882,416,445 lbs. crude oil yielded 79,691,367 lbs. refined oil—9.62% loss compared to 7.42% loss last year.

SHIPMENTS OF REFINED OIL.

	Export	pounds
	1923-24.	1922-23.
August	1,306,927	1,679,265
September	1.028,332	3,531,357
October	1,260,337	3,252,926
November	1,481,990	9,166,261
December	1,425,316	5,764,885
January	1,395,977	3,529,909
February	1.089.563	2,491,179
March	1,279,799	2,145,460
April	1,467,262	2,154,480
May	1,574,368	1,805,450
_	Domestic	pounds-
August	79,846,139	65,971,810
September	66,531,871	88,177,539
October	91,730,678	120,302,828
November	85,982,865	96,064,577
December	56,638,683	71,605,676
January	79,983,942	93,548,780
February	60,028,626	72,229,253
March	63,569,274	63,532,595
April	73,656,072	57,070,468
May	70,067,504	51,253,970
Total	728,035,654	779,757,498

REFINED OIL-Summary in barre	els of 400 pounds.
	Produced
-1	923-24. 1922-23.
Old crop stock	345.281 409.628
August	29,494 26,607
September	
October	
November	
December	
December	.275.868 868.696
January	
February	
March	
April	
May	124,183 96,678
Total2,	339,510 2,595,266
	Consumed
August	202.883 169,128
September	168,900 229,272
October	
November	
December	202 450 242 607

January 203.400	242,007
February 152,795	186,801
March	164,195
April 187,808	148,062
May 179,105	132,649
Total	2,038,197
1923-24.	1922-23.
Refined oil on hand 486,146	557,069
Seed on hand will produce 43.892	16,972
Crude oil on hand wil lproduce 117,750	54,839
Seed still to be received will produce 56,909	27,079
Total 704,697	655,959
Less approximate minimum carry	

Over for end or senson area. To	
1924 364,663	364,663
Available for coming two months. 340,034	291,296
Menthly average consumption for first ten months	†203,819
Monthly average consumption for coming two months	†151,249
Monthly average consumption for all twelve months	†195,058

VEGETABLE OILS

THE NATIONAL PROVISIONER is Official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association and the Mississippi Cottonseed Crushers' Association.

Operations Fair-Market Strong-Some New Season Highs-Cash Trade Good -Crude Scarce-Lard Irregular.

Commission house interest in cottonseed oil futures on the New York Produce Exchange the past week was on a fairly satisfactory scale, but considering the situation in oil, and the activity in some other speculative markets, operations were, on the whole, rather light. The market, nevertheless, was distinctly strong, the old crops again selling into new highs for the upward movement, while the late quoted months sold into new high ground for the season.

Commission house demand was rather scattered, and there was no concentrated buying, the market working up slowly daily, on the removal of hedges against cash sales, and scattered short covering, while profit taking was readily absorbed. The July delivery sold up to 11.23c, compared with the season's low of 9.46c, the tightness in the July being a fair reflection of the strength in the cash old situation. Refining interests, finding it impossible to buy crude oil, as the latter has been well cleaned up, have also been experiencing a persistently good cash demand, which necessitated removal of hedges.

Around the ring sentiment continued buying, the market working up slowly

Around the ring sentiment continued mixed, but sellers have been rather

cautious. A few professionals have been fighting the advance of late, at times forcing moderate natural reactions from temporarily over-bought conditions, but on the setbacks offerings persistently dried up, and the market responded readily to any increase in demand.

Sentiment Continues Mixed.

The profit taking on the bulges has tended to prevent a weak technical position from developing, and it was noticeable that one of the big refiners who was a good buyer of July for the past few weeks, was this week actively engaged in getting in September shorts. This support materially helped the market, and forced the locals to cover on the small breaks.

breaks.

In all quarters the most optimistic reports are received on consumption and distribution of oil during the month of June. Leading cash handlers continue to estimate the June distribution at 190,000 to 200,000 bbls., while some are inclined to look for more than the outside figure.

Contrary to the general belief, a great part of the cash buying of late has been for reasonably prompt shipment, with very little buying ahead, except in a few cases so that in cash circles it is still contended that distributors' stocks are not large, and that consumers must continue to buy to some extent, with prices the secondary consideration.

Compound trade continues very slow,

Compound trade continues very slow, according to all reports, but it is evident

that cotton oil is becoming less and less dependent upon compound as a source of distribution. This particular season, more than any other, will emphasize that fact, as pure lard has constantly competed in a serious way with the compound trade, and a great part of the season has actually sold under the compound level.

Compound Trade Slow.

The increased distribution the past few months has not been due to any betterment in compound trade but has, to a great extent, been due to the heavy-takings by the salad dressing trade. The latter is becoming more and more of a factor each year, and in many cases refiners are not pushing compound, but are pushing their winter oil business.

pushing their winter oil business.

Deliveries on July contracts thus far have been 4,500 bbls., including 1,300 tendered that were re-issued. Part of the oil was taken by a prominent mid-western refiner, and it should not be surprising to see this oil come back on the market in August, as that particular interest is credited with being short the August delivery. The tenders did not have any influence, except momentarily, and the July readily tightened up and gives evidence of an existing short interest, although the remaining open interest in the current month is believed to be small.

The weather south has been somewhat

The weather south has been somewhat better, but has as yet not brought any particular selling of the new crop deliveries; interest in the latter remains

ASPEGREN & CO., INC.



S COOKING

Produce Exchange Building NEW YORK CITY DISTRIBUTORS



AGENTS IN PRINCIPAL EASTERN CITIES





SELLING AGENTS FOR

The Portsmouth Cotton Oil Refining Corp., Portsmouth, Va. The Gulf & Valley Cotton Oil Co., Ltd., New Orleans, La. The International Vegetable Oil Co., Savannah, Ga.

24. 193

,331

924.

lded d to

ided d to

1,367

7,496 ınds.

2-23. 3,628 3,607 9,323 1,974 1,731 1,696 1,644 1,344 1,290 1,678

9,128 9,272 8,889 3,077 3,427 2,697 6,801 4,195 8,062 2,649 8,197

5,959

1.296 3,819 1,249 5,058

To remove objectionable color and odor from your product



THE PURE CARBON FOR PURE PRODUCTS

The distinctive features are:

Exceptional Purity
Great Capacity for Absorbing Impurities
High Decolorizing Activity
Marked Efficiency for Improving Odor and Flavor Remarkable Filtering Properties Write us for further particulars

INDUSTRIAL CHEMICAL (

200 FIFTH AVENUE

NEW YORK

rather light, and the general disposition was to await the Government cotton crop report, although quite a little interest was displayed in the private estimates, which had ranged from 11,200 to about 11,800,000 bales.

Predict a Shortage of Oil.

In discussing the prospects for the next few months, one shrewd refining interest stated that it was his belief that a shortage of oil would develop before new oil was available in quantity. Recently this particular interest has been talking of a shortage during the month of December, but owing to the recent trade absorption, it is now believed that the pinch will be felt during the month of August.

The statistical position is being watched very closely, and of course a good deal depends upon the volume of cash business during July and August, while the disposition is to ignore the new crop outlook entirely, as far as the next few months are concerned.

It is argued that no matter how favorable cotton conditions may be for the next few months, new oil would not be available, so that the effects of a material improvement in cotton conditions would possibly be a material widening of the spread between the old and the new crop months.

The land market continues irregular In discussing the prospects for the next

spread between the old and the new cropmonths.

The lard market continues irregular. Cash trade is fair, but not large, while stocks continue to increase, and deliveries on July contracts have been heavy. At Chicago the lard stocks increased nearly ten million pounds the last two weeks of June, and now total 92,002,000 lbs. against 71,255,000 on June 1st and 52,662,000 lbs. on July 1st last year.

The heavy run of hogs has been on for so long that it attracts less and less attention, as everyone is confident that sooner or later the run must, of necessity, fall off considerably. The hog level continues weak, while corn went to new highs at Chicago, July selling at nearly a dollar a bushel, which does not speak well for feedbushel, which does not speak well for feed-ing operations, while private estimates on the corn crop issued this week were for

prospects some 400,000,000 to 500,000,000

bu. less than last year.

The crude markets continue nominal with the southeast 9½c bid, while bids of 95%c in Texas did not bring out much oil.

COTTONSEED OIL-Market transactions-

Thursday, June 26, 1924.

		-Rai	nge-	-Cl	osir	ng-
	Sales.	High.	Low.	Bid.	As	ked.
Spot				1070	a .	
lune	. 100	1185	1085	1070	a .	
Inly	4600	1086	1075	1080	a]	1083
Aug	. 100	1080	1080	1080	a l	1083
Sept	. 7100	1085	1075	1083	a]	1085
Oct	. 4500	1048				
Nov		948	941	944	a	946
Dec		940	933	935	a	941
Jan				937	a	943
Total sales	, incl	uding				

Friday, June 27, 1924.

											-Rar High.	nge-	C1	08	ing-
									S	ales.	High.	Low.	Bid.	A	sked.
Spot													1085	a	1090
Inly										6000	1089	1078	1088	a	1089
Ang										300	1080	1080	1083	a	1088
Sept.						_				9400	1087	1080	1084	a	1085
Oct										1700	1048	1043	1044	a	1045
Nov	•	•	•	•	•	•	•						945	a	947
Dec	*	*	•	*	•	•	•	•	•				935	a	937
Ian.						•	•	•	•	200	937	936	936	a	940
Feb													936	a	950
											uding			2	7,400
											Nom				.,

Saturday, June 28, 1924.

											-Range-							_	-Closing-					
									S	al	e	S.		H	i	gl	h.	L	0	V	٧.	Bid.	A	sked.
Spot														-								1085	a	
July																						1085	a	1100
Aug.	•	-	ľ	ľ		ĺ		Î														1089	a	1093
Sept.	•	•	•	•	*		Ĵ			1	4	0	Ó	1	10	8	15	1	0	8	31	1083	a	1086
Oct.		•	•	*		•	•			1	2	ñ	n	1	1	14	5	1	0	14	3	1043	a	1046
Nov.	•		•	•	•	*	•		•	*	2	0	M	-	()5	0		C	14	17	948	a	950
Dec.			•				•	•	•		_				-				-			930	a	942
Jan.	*			•	*		•				•		*			*	•				•	935	a	945
Feb.																							2	950
reb.																						200	CF	100

including switches, 3,000 P. Total sales, including Crude S. E. 925 Noml.

Monday, June 30, 1924.

		-Rar	nge	-C1	08	ing-
	Sales.	High.	Low.	Bid.	A	sked.
Spot					a	1150
July		1123	1100	1100	a	1025
Aug	200	1090	1090	1093	a	1098
Sept	. 9300	1094	1083	1092	a	1093
Oct		1048	1041	1046	a	
Nov		250	948	949	a	950
Dec		945	938	943	a	945
Jan	. 300	946	940	940	a	946
Feb				940	a	955
Total sales	, includ	ding s	witch	es, 14	,91	00 P.
Crude S. E.	925 No	ml.				

Tuesday, July 1, 1924.

			-	••	•	oudy,	-Rai		-C1	os	ing—
					2	sales.	High.	Low.	Bid.	A	sked.
Spot									1100	a	1150
July						500	1100	1100	1090	a	1100
Aug.						500	1098	1095	1095	a	1100
Sept.						10200	1097	1083	1095	a	1096
Oct.						3400	1047	1025	1040	a	1041
Nov.									940	a	950
							938				
							uding			1	5,900
							Noml		,		

Wednesday, July 2, 1924.

		-Closing-
	High. Low.	Bid. Asked.
Spot		1090 a 1115
Jan	. 930 925	920 a 925
Feb		920 a 935
July		1085 a 1100
August	. 1100 1100	1085 a 1090
Sept	. 1098 1080	1083 a 1085
Oct		1014 a 1015
Nov		930 a 932
Dec	. 940 930	920 a 924
Total 12,900.		

SEE PAGE 37 FOR LATER MARKETS.

SOUTHERN MARKETS.

New Orleans.

(Special Wire to The National Provisioner.) New Orleans, La., July 2, 1924.-Crude, 93/4c asked; 91/2c bid. Stocks so low influence on market almost negligible. Best quality refined bleachable almost exhausted. Thirty-six per cent meal, \$40.00; 40% meal, \$45.00; loose hulls, \$15.30; sacked hulls, \$20.00; all delivered New

Dallas.

Orleans. Supplies small.

(Special Wire to The National Provisioner.) Dallas, Tex., July 2, 1924.—Cottonseed \$40.00 per ton delivered Dallas. Crude oil, 91/2c; cake and meal, \$43.00; Dallas; Hulls on location, \$11.00; linters, first cut, 81/4 @ 11c; second cut, 41/4 @ 5c; mill run, 41/2 @ 51/2 c.

VEGETABLE OIL IMPORTS.

The United States imported 20,081,958 lbs. of cocoanut oil, valued at \$1,613,777 during April, 1924, according to the U. S. Department of Commerce. This entire amount came from the Philippine Islands.

During the same month, 4,660,955 lbs. of peanut oil were imported, valued at \$367,231. Most of this came from China.

The Procter & Gamble Co.

COTTONSEED OIL

Puritan, Winter Pressed Salad Oil

oreas, Prime Winter Yellow nus, Prime Summer White erling, Prime Summer Yel

White Clover Cooking Oil Marigold Cooking Oil Jersey Butter Oil

Nonstar Coconnut Oil

P&G Special (Hardened) Coconnut Oil

Post Tyory, N. Y.

Refineries

Refineries

Refineries

Refineries

Refineries

Nansas City, Kan. CINCINNATI, OHIO
Macon, Ga.

Dallas, Texas
Hamilton, Canada

Cable Address: "Procter"

THE EDWARD FLASH CO. 29 BROADWAY, N. Y. CITY

BROKERS EXCLUSIVELY

VEGETABLE OILS In Barrels or Tanks

Hardened Edible Cocoanut Oil

COTTON OIL FUTURES

On the New York Produce Exchange

924.

ing— sked.

950 5,900

ng— sked. 1115 925

935

1100

1085

rude, v in-

Best

0.00; 5.30; New

seed

e oil,

Hulls

81/4@ 11/2@

1,958

3,777

U. S. ntire ands. lbs. d at ina.

S

The Plain Truth

Let's do away with fancy words and face the plain, naked truth.

What is needed most in the packinghouse? It's "EDUCATION!"

Why?

Because there are hundreds of the smaller packers today who operate plants without knowing exactly the yields and returns of a good many of their products.

It is only the large plants which can have laboratories and testing and efficiency engineers. But the owner of the smaller packing plant can know just as much about the packing business-if he only wants to know it.

How? It's only by comparison—comparing his results with those obtained by operators in the more efficient plants.

Let's cite an example which will hit your pocket-book: What is your shrinkage on hides? Can you give the figures exactly? How do you know that you are not losing two, three or even five per cent on your shrinkage? What does it mean to you in dollars and cents if you lose only two per cent on your shrinkage?

Information like this is worth thousands of dollars to any packer, and it is only ONE good reason why "THE PACKERS' ENCYCLOPEDIA" should be on your desk.

> We may all be smart, but no one knows it all, and the experience of many people in the business can always help us.

> Better order your copy now before it is too late.

Chapter One:—CATTLE
Breeds of Cattle
Market Classes and Grades of
Cattle and Calves
Dressing Percentages of Cattle
Beef Slaughtering
Beef Cooling
Beef Grading
Beef Grading
Beef Loading
Handling of Beef for Export
Beef Curing Barreled Beef
Curing Barreled Beef
Manufacture of Dried Beef
Handling and Grading Beef
Casings
Handling Miscellaneous Meats
Manufacture of Beef Extract
Manufacture of Beef Extract
Manufacture of Oleo Products
Tallow
Handling of Hides
Chapter Two:—HOGS

Handling of Hides
Chapter Two:—HOGS
Breeds of Hogs
Market Classes and Grades of
Hogs
Dressing Yields of Hogs
Hog Killing Operations
Hog Cooling
Shipper Pigs
Perk Cuts
Smokehouse Operation
Ham Boning and Cooking
Lard Manufacture
Hog Casings
Edible Hog Offal or Miscellancous Meats
Treparation of Pigs Feet
Chapter Three:—SMALL

Chapter Three: -SMALL

hapter Three:—SMALL STOCK Market Classes and Grades of Sheep and Lambs Sheep Killing Sheep Dressing Sheep Casings Casings from Calves and Yearlings

Chapter Four:—INEDIBLE BY-PRODUCTS

SY-PRODUCTS
Inedible Tank House
Blood and Tankage Yields
Tankage Preparation
Digester Tankage
Tallow and Grease Redning
Manufacture of Glue
Bones, Horns and Hoots
Handling Hog Hair
Catch Hasins
Cost and Return on ByProducts

Chapter Five: - MISCELLA-

hapter Five:—MISCELLA-NEOUS Sausage Manufacture Meat Canning Animal Glands and Their Uses The Lingthouse Chemistry Facklinghouse Cost Account-ing ing Location of Packing Plants Construction of Packing

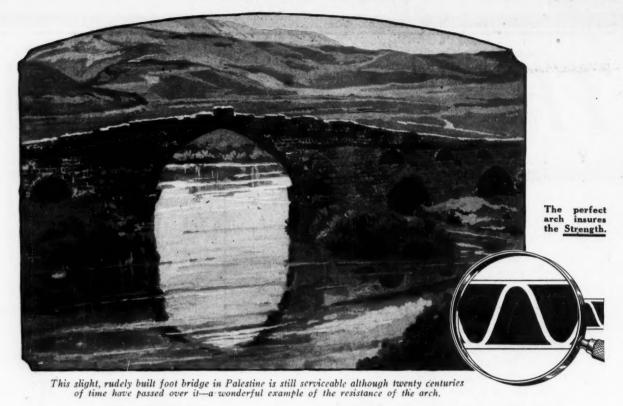
Chapter Six:—VEGETABLE
OILS
Vegetable Oil Refining
Compound Manufacture
Winter Oil
Hydrogenation of Oils and
Fats
Manufacture of Margaria



The Packers' Encyclopedia

Price, \$12.00 Postpaid in U. S. Foreign, \$12.25 Published by

THE NATIONAL PROVISIONER Old Colony Building



The Mid-West Box is Strengthened by The Arch in the same way as a Bridge

For 2000 years countless feet of men and beasts and millions of tons of various burdens have been carried safely over this bridge whose sole claim to strength lies in its supporting arch.

Whether in bridge or corrugated fibre board shipping package, like the popular and widely used Mid-West Box, the function of the arch is the same—to protect, to support, to brace, to absorb weights, pressures and shocks, and to insure safety.

The high arched corrugations of the Mid-West Box save 30% to 70% of smashage costs with ordinary boxes, making this box the logical shipping package for thou-



The increasing use of Mid-West Boxes in your field is entirely due to their filling a need-BETTER.

sands of commodities. It is built up to a quality, not down to a price. And as the higher priced suit of wool will outlive the cheap suit of shoddy-so the Mid-West Box can not be placed in comparison with low-priced, nondescript boxes that do not "deliver the goods." Mid-West Boxes conform to every railroad requirement includ-

ing highest test liners-the guarantee of a better, more economical service that you cannot afford to ignore.

A card will bring an expert to check over your problems. Write today. No obligations.

Our "Perfect Package" Data Sheet is free on request.

IID-WEST BOX COMPANY

GENERAL OFFICES

18th FLOOR CONWAY BLDG. CHICAGO, ILL.

Corrugated Fibre **Board Products**



Three Distinctive Mid-West Features

Waterproof Container: Is everything its name implies.

Triple Tape Corners: Stop tapes from splitting and peel-ing.

ANDERSON, INDIANA KOKOMO, INDIANA **CHICAGO** CLEVELAND, OHIO FAIRMONT, W. VA

THE WEEK'S CLOSING MARKETS

THURSDAY'S CLOSINGS.

Provisions.

Hog products irregular with fairly liberal hog receipts, limited foreign demand, light trade and mixed sentiment. July lard deliveries well taken. Government June pig survey indicates decrease of about eight million hogs in spring crop in corn belt with a decrease in number of sows farrowed this spring in corn belt of 20 per cent and of pigs saved 17 per cent, while the number of sows bred for fall farrowing shows decrease of 11 per cent.

Cottonseed Oil.

Cotton oil market easier in latter part of the week, selling new crops on strength of government report showing record area planted and prospective crop of 12,144,000 bales. Old crops relatively strong; no pressure on nearbys. Cash trade continued good but cotton outlook made sentiment more mixed.

Quotations on cottonseed oil at Thursday noon, were July, \$10.80@11.00; August, \$10.80@10.90; September, \$10.83@10.86; October, \$10.13@10.15; November, \$9.21@9.23; December, \$9.15@9.20; January, \$9.15@9.20; February, \$9.15@9.30.

Tallow.

Considerable extra sold, 71/2c New York, an advance of 1/4c.

Oleo Oil and Stearine.

Stearine, 121/4c.

THURSDAY'S GENERAL MARKETS.

New York, July 3, 1924.—Spot lard at New York, prime western, \$11.45@11.55, middle western, \$11.30@11.40; city, steam, \$11.00; refined, continent, \$12.25; South American, \$12.75; Brazil kegs, \$13.75, compound, \$12.50@12.75.

Liverpool Provision Markets.

Liverpool Provision Markets.

Liverpool, July 3, 1924—(By Cable)—
Quotations today: Shoulders, square 61s;
New York, 56s; shoulders, picnics, 57s;
hams, long cut, 88s; hams, American cut,
90s; bacon, Cumberland cut, 70s; bacon
short backs, 74s; bellies, clear, 71s; Wiltshire sides, American, 71s; Canadian, 80s;
spot lard, 65s 6d.

Hull Oil Market.

Hull, England, July 3, 1924 — (By Cable.)—Refined cottonseed oil, 41s 6d; crude cottonseed oil, 39s 3d.

APRIL MARGARINE STATISTICS.

Following are the figures of actual production for the month of April, 1924, as reported by margarine manufacturers to the U. S. Department of Agriculture.

The reports of the Bureau of Internal Revenue are estimates based on the value of stamps sold during the month and are not given in this report.

UNCOLORED MARGARINE.

	animal vegetable d vegetable	60,822 8,934,100	April 1923. 27,720 7,885,728 10,008,634
Exclusively Exclusively Animal and		300,750	245,054 610,310

This was an increase of 1,492,829 pounds in April, 1924, over the corresponding month a year ago, or about 8 per cent.

COTTONSEED OIL EXPORTS.

Exports of cottonseed oil from New York June 1 to June 30, 250 bbls.

VEGETABLE OIL MARKETS.

COCOANUT OIL- A firmer market was again witnessed the past week, and while the volume of business was reported as moderate, the market continued to reflect the betterment in the oil situation in general. Offerings were lighter, and firmly held, while copra was 1/4c higher, and quoted at 5c f.o.b. Pacific coast, and 51/2c New York.

At New York Ceylon in barrels was quoted at 93/8@91/2c, tanks coast 81/8@81/4c, tanks New York 8½c; Cochin, bbls., New York 93/@10c; edible, bbls., New York,

104/@11c. SOYA BEAN OIL—The market con-SOYA BEAN OIL—The market continues nominal, owing to scanty supplies available, but the undertone is very firm. At New York crude in barrels was quoted at 12@12¼c; tanks New York 10¼@10¾c edible, barrels, New York 10¼c—tanks, Pacific coast, 9¾@97%c.
PEANUT OIL—The volume of business continued small, and supplies everywhere light, the undertone is quite steady. At New York refined, bbls., quoted at 14½@14¾c.

where light, the undertone is quite steady. At New York refined, bbls., quoted at 14½@14¾c.

CORN OIL — The market showed further strength with a better demand, again helped by strength in cotton oil; in some quarters a better demand for refined oil was reported. At New York crude in barrels was quoted at 10¾@11c, refined barrels 11½@11¾c, cases \$13.38, and tanks Chicago 9½c.

PALM OIL—With spot supplies well cleaned up, and cabled offerings firm, the market developed more strength, influenced somewhat by the better feeling in tallow. At New York Lagos spot was quoted at 7¼c, shipment 7¼@7¾c, Niger spot 7c, shipment 6½c.

spot 7c, shipment 6%c.
PALM KERNEL OIL—The market was dull and steady with imported quoted

at 84/@8%c.
SESAME OIL—Demand has been spasmodic, but better than of late; the undermodic, but better than of late; the undermodic and spot

modic, but better than of late; the undertone was firmer, with cotton oil, and spot sesame New York, barrels, was quoted at 11½@11½c, and shipments at 11½c. COTTONSEED OIL—Demand has been good, spot supplies are small, and tightly held, with P. S. Y. spot, barrels, New York quoted at 11½@12c. Southeast crude 9½c bid—Texas 9½c bid. Bleachable, tanks, New York, 10¾@11c.

Smoked Meat **Tests**

Do you know what your smoked meats cost you, wrapped and packed and ready to ship?

Have you an accurate method of figuring your costs, all the way from the loose cured meats to the finished product? Do you figure in everything, including shrinkage, labor, operating costs, supplies, etc.?

In figuring smoked cost from cured do you divide price by yield, or multiply by shrink? One way is wrong and will cost you money.

Send a 2-cent stamp for the article on "Short Form Smoked Meat Tests." Address Editor, THE NATIONAL PROVISIONER, Old Colony Bldg., Chicago, Ill.

TRADE GLEANINGS.

Tittle Bros. Packing Co., Gary, Ind., has opened a new retail meat market in Kenosha, Wis.

The Indian River Fertilizer Company, Vero, Fla., plans to erect a 60-ton capacity fertilizer plant.

The South Texas Cotton Oil Company, ouston, Tex., has increased its capital louston, from \$600,000 to \$1,250,000.

The annual convention of the Missis-ppi Cottonseed Crushers' Association ill be held at Biloxi, Miss., July 15 and 16.

The Guthrie Cotton Oil Company has been incorporated in Guthrie, Okla., with a capital stock of \$200,000, by E. Cook, C. W. Patterson and A. T. Buenting.

A new branch house is soon to be erected in Nashville, Tenn., by Armour and Company. The new building will reand Company. The new building will re-place the old branch house in that city.

The Beef By-Products Company has been incorporated in Elizabeth, N. J., with a capital stock of \$125,000, and will manufacture meat scrap for stock feeding purposes.

The Spedden Packing Co., Inc., has been incorporated in Cambridge, Md., with a capital stock of \$30,000, by J. Rowland Stewart, Geo. W. Woolford and John S. Skinner

The Talbot Farms Company has been incorporated in Easton, Md., by A. Sydney Cover, Jr., Wm. E. Withgott and J. R. Wheatley. The concern will operate a packing plant.

H. D. Ansley has resigned as superintendent of the beef department of the Pittsburgh Provision & Packing Co., it was announced recently. He will be succeeded by George Ross, formerly night superintendent, while E. Renter has been appointed night superintendent. Mr. Ansley has left for California with his family, where he expects to make his home.

PORK CUTS AT NEW YORK. (Special Report to The National Provisioner from H. C. Zaun.)

New York, July, 2, 1924.-Wholesale cuts: Pork loins, 19@21c; green hams, 8-10 lbs., 161/2c; 10-12 lbs., 16c; 12-14 lbs., 151/2c; green picnics, 4-6 lbs., 91/2@101/2c; 6-8 lbs., 81/2@9c; green clear bellies, 6-8 lbs., 13½c; 8-10 lbs., 13c; 10-12 lbs., 12½c; 12-14 lbs., 12c; green rib bellies, 10-12 lbs., 12c; 14 1bs., 12c; green rib bellies, 10-12 lbs., 12c; S. P. clear bellies, 6-8 lbs., 11c; 8-10 lbs., 11½; (10-12 lbs., 11c; 12-14 lbs., 11c; S. P. clear bellies, 10-12 lbs., 11c; 12-14 lbs., 11c; S. P. hams, 8-10 lbs., 16½; (2-14 lbs., 16½; 12-14 lbs., 16½; 12-14 lbs., 15½c; 18-20 lbs., 18½c; dressed hogs, 11½c; city steam lard, 11c; compound, 12½@12¾c.

BRITISH PROVISION MARKET.

(Special Letter to The National Provisioner.) Liverpool, England, June 21, 1924.

There has been a generally good tone all week in the bacon trade, and although prices are not showing much advance they have a hardening tendency for most cuts. Irish and Danish are both firm and higher, and Canadian also shows more firmness. The American bacon position is helped by the relative firmness of other cures, and there is a firmer tendency in the market with a demand of a more encouraging character.

Wiltshires do not show much change, but Cumberland cuts, bellies and backs are but Cumberland cuts, bellies and backs are all firmer. Hams have a fair sale at slightly better prices. In shoulders, squares are dearer, and there is a good inquiry for light average picnics.

On spot lard has firmed up in response to the rise in Chicago, and there has been an improved trade on this article.

LIVE STOCK MARKETS

CHICAGO.

(Reported by U. S. Bureau of Agricultural Economics.)

Chicago, July 2, 1924.

CATTLE-A slight decrease in receipts, and healthier dressed beef outlet were the principal factors in elevating prices on foot. Fed steers of value to sell at \$9.50 upward finished 25@35c higher than last Thursday, while scarcity and consequent broad demand for yearlings boosted these 35@50c higher.

Desirable grain fed heifers shared the eneral upturn on yearlings. Grain fed, general upturn on yearlings. Grain fed, fat cows, kinds eligible to \$6.00 and better advanced 25c but slowness continued to advanced 25c but slowness continued to mark the price path not only of grassy cows but also pasture dieted steers and yearlings.

Bulls came back energetically gaining 25 @35c, while the upturn on yeal calves was \$1.00, packers paying upward to \$10.25 to-day for choice kinds. Highly finished fed steers were comparatively numerous. Long fed Nebraska and Iowas topped at \$11.10; \$10.50@11.00 kinds being fairly numerous, best long yearlings topping at \$10.50.

HOGS—In the last six market days swine prices fluctuated sharply, but the gains more than balanced the losses by a very narrow margin. In general values were 5@10c higher than last Wednesday, which was only a very minor part of the upturns scored late last week. More liberal receipts around the market circle, slack inquiry from shippers and the ap-proaching two-day holiday were bear factors in trade.

Some widening in prices appeared during the sharp declines of this week, with packing and lower grades discounted more severely. Weighty butchers continued to command the best figures.

SHEEP—General improvement in the

SHEEP—General improvement in the dressed trade gave tone to the foot market during the week and after last week's steady close the three first days of the calendar week saw values on lambs advancing \$1.00@1.25 with cull natives 75@1.00 higher. Yearling wethers showed sympathetic gains around \$1.00 and young wethers in the age division were 25@50c higher. higher.

E. E. JOHNSTON

Hog Buyers Exclusively

Live Stock Exchange East Buffalo, N. Y.

You Get What You Want in buying Cattle or Hogs on order from

Schwartz-Feaman-Nolan Co. Kansas City Stock Yards

Kinds over two years old and fat ewes maintained an even price keel. Bulk of range fat lambs moved at \$10.00@15.00 with \$15.10 top to city butchers today, while \$13.75 stopped best on sale last Wednesday. Natives bulked from \$13.50@ Choice lightweight ewes are quotable to \$6.00.

KANSAS CITY.

(Reported by U. S. Bureau of Agricultural Economics.,

Kansas City, July 2, 1924.

CATTLE-Considerable price improvement has marked the week's trade in beef steers and most classes closed 15@25c higher than last Thursday while the more desirable grades of yearlings are 25@50c up. Texas grassers have held their own and are steady to strong.

Choice grades of both matured steers and yearlings have been relatively scarce and those offered met good outlet. Best handyweights and heavy steers cashed up to \$10.00 and choice yearlings reached \$10.30, the week's top. Bulk of fed steers were taken from \$7.75@9.75, while most of the grassers went from \$4.60@6.00, cake feds realizing \$7.00@9.25. Better grades of fed stock are 25@50c higher while in between grades and canners and cutters are 15@25c over the previous Thursday. Bulls are 10@15c higher and most killing calves show 50c@\$1.00 advances, best vealers bringing \$8.00@8.25.

HOGS—Trade on foot has been uneven, price diverges early in the week having

HOGS—Trade on foot has been uneven, price advances early in the week having been lost with closing levels 5@10c lower than last Thursday. Best butchers sold up to \$7.25 early in the week but today choice offerings had to go at \$7.05 with the bulk of the more desirable grades from \$6.50@7.00. Shipping orders have been limited. Very little change has been registered for packing sows, the bulk selling from \$6.25@635.

SHEEP--With a more satisfactory outlet in the east for the dressed product, the live market for both sheep and lambs has live market for both sheep and lambs has reacted and a part of the recent loss has been regained. Most fat lamb prices are 50c@\$1.00 higher than last Thursday and good sheep fully 50c higher.

Idaho lambs sold up to \$13.50, best natives landed at \$13.00. Bulk of the range lambs sold from \$13.25@13.50 and very few

good natives had to sell under \$12.00. Texas wethers sold up to \$6.75 with others down to \$6.35. Comparatively few fat ewes went to killers and sales ranged from \$4.50@6.00 according to weight and qual-

LIVESTOCK PRICES AT LEADING MARKETS.

Following are livestock prices at five leading Western markets on Wednesday, July 2, 1924, as reported to The National Provisioner by leased wire of the Bureau of Agricultural Economics, U. S. Department of Agriculture:

pigs excluded):	CHICAGO.	KANSAS CITY.	OMAHA.	E. ST. LOUIS.	ST. PAUL.
TOP BULK OF SALES. Hyr. wt. (250-350 lbs.), medch. Med. wt. (200-250 lbs.), med-ch. Lt. wt. (160-200 lbs.), comch. Lt. it. (130-100 lbs.), comch. Packing hogs, smooth. Packing hogs, smooth. Sightr. pigs (130 lbs. down), med. ch. Av. cost and wt. Tues. (pigs excluded)	\$ 7.25 6.50@ 7.10 6.90@ 7.25 6.85@ 7.20 6.35@ 7.05 5.35@ 6.75 6.30@ 6.35 5.90@ 6.30 5.00@ 5.75 6.88-254 lb.	\$ 7.05 6.90@ 7.05 6.85@ 7.05 6.90@ 7.05 6.40@ 7.05 6.40@ 6.50 6.20@ 6.35 6.00@ 6.20 4.75@ 5.75 7.01-211 lb.	6.85 6.10@ 6.75 6.40@ 6.85 6.25@ 6.80 5.75@ 6.80 5.90@ 6.40 5.90@ 6.15 5.75@ 5.90 4.00@ 5.00 6,52-247-lb.	\$ 7.30 7.10@ 7.25 7.15@ 7.30 7.05@ 7.30 6.65@ 7.20 5.75@ 7.00 6.15@ 6.25 5.90@ 6.00 7.09-212 lb.	\$ 6.75 5.60@ 6.60 6.40@ 6.75 6.25@ 6.65 6.25@ 6.60 5.756@ 6.00 5.50@ 6.75
Slaughter Cattle and Calves:					
STEERS (1,100 LBS. UP): Cholee and prime Good Medium Common	10.35@11.25 9.50@10.50 8.00@ 9.60 6.00@ 8.00	9.85@10.80 8.85@10.00 7.00@ 9.00 5.25@ 7.25	9,80@10,60 8,80@10.00 7,50@ 9.00 6,00@ 7.75	$\begin{array}{c} 10.25@11.00 \\ 9.50@10.25 \\ 7.25@9.50 \\ 6.00@7.25 \end{array}$	8.50@ 9.50 7.00@ 8.75 5.75@ 7.25
STEERS (1.100 LBS, DOWN):					
Choice and prime Good Medium Common Canner and cutter	$\begin{array}{c} 10.00@10.75 \\ 9.25@10.35 \\ 7.50@9.50 \\ 5.50@8.00 \\ 4.00@5.50 \end{array}$	9.60@10.60 8.65@ 9.70 6.50@ 8.75 4.75@ 6.50 3.50@ 4.75	$\begin{array}{c} 9.35@10.20 \\ 8.50@9.80 \\ 7.35@8.80 \\ 5.25@7.50 \\ 3.65@5.25 \end{array}$	9.75@10.50 9.00@ 9.75 6.75@ 9.00 5.00@ 6.75 3.50@ 5.00	8.25@ 9.25 6.75@ 8.25 4.75@ 6.75 3.00@ 4.75
LT. YRLG. STEERS AND HEIFERS: Good to prime (800 lbs. down)	8.50@10.25	7.85@ 9.85	7.50@ 9.50	8.25@ 9.50	7.00@ 9.00
HEIFERS: Good-choice (850 lbs. up) Common-med. (all weights)	7.50@ 9.75 5.35@ 7.50	6.50@ 8.75 3.50@ 6.50	6.35@ 8.50 4.00@ 6.35	6.25@ 8.25 4.50@ 6.25	6.00@ 8.50 4.25@ 6.00
COWS: Good and choice Common and medium Canner and cutter	5.30@ 8.00 3.65@ 5.50 2.25@ 3.65	5.25@ 7.65 3.40@ 5.25 2.00@ 3.40	5.25@ 8.10 3.35@ 5.25 1.75@ 3.35	5.25@ 7.00 4.00@ 5.25 1.75@ 4.00	4.50@ 7.00 3.00@ 4.50 2.00@ 3.00
BULLE: Good-ch. (beef yrlgs. excluded) Canmed. (canner and bologna)	4.85@ 7.00 3.40@ 5.00	4.65@ 5.85 3.00@ 4.65	4.65@ 6.25 3.35@ 4.65	5.00@ 6.50 3.00@ 5.25	4.50@ 6.25 3.00@ 4.50
CALVES: Med.ch. (190 lbs. down) Cull-com. (190 lbs. down) Medch. (190-260 lbs.). Medch. (260 lbs. up) Cull-com. (180 lbs. up)	8.00@10.25 5.00@ 8.00 5.00@10.00 4.00@ 8.00 3.00@ 7.75	6.25@ 8.50 3.00@ 6.25 4.50@ 8.00 4.00@ 7.25 3.00@ 4.25	7.00@ 9.75 4.00@ 7.00 5.00@ 9.25 4.75@ 7.00 3.50@ 6.75	6.00@ 9.75 3.50@ 6.00 4.00@ 9.00 4.00@ 7.50 3.00@ 4.00	6.00@ 8.25 3.50@ 6.00 4.00@ 8.00 3.50@ 6.00 3.00@ 6.00
Slaughter Sheep and Lambs:					
Lambs, medpr. (84 lbs. down) Lambs, cull-com. (all weights) Yearling wethers, medprime Wethers, medpr. (2 yrs. old and over)	7.75@12.50 9.75@12.75	11.50@13.75 6.00@11.50 8.00@11.50 5.00@ 7.90	12.00@14.00 $7.50@12.00$ $9.25@11.50$ $5.00@9.25$	$\begin{array}{c} 11.25@13.50 \\ 6.50@11.25 \\ 8.50@11.25 \end{array}$	11.25@13.25 7.00@11.25 8.50@11.50 5.00@ 8.75
Ewes, canner and cull	2.75@ 6.00	3.00@ 6.00 1.00@ 3.00	3.00@ 5.50 1.00@ 3.00	3.00@ 5.50 1.00@ 3.00	2.75@ 5.25 1.00@ 2.75

E. R. Whiting

L. H. McMurray

Indianapolis

Live Stock **Purchasing Agents** Indiana

les

ers

ay.

est

en.

ng

up

ılk

(a

ed.

or

he

as

as

re

nd

ıa-

ge

00.

fat

al-

L.

8.60 8.75 8.65 8.60 8.50 8.75

3.25 1.25 1.50 8.75 5.25 2.75

ST LOUIS

(Reported by U. S. Bureau of Agricultural Economics) E. St. Louis, Ill., July 2, 1924.

CATTLE-Following last week's drastic declines a let up in receipts this week enabled the country to recoup part of the losses, native beef steers and canners advancing 25c as compared with the close of last week. Light yearlings and heifers and cutters gained 25@50c; better grade beef cows and bologna bulls 50c up: light vealers \$1.00@1.25 higher.

Tops for week: Matured steers, \$10.35; yearlings, \$10.25; heifers, \$9.25; bulk of native steers, \$7.65@10.00; yearlings and heifers, \$8.00@9.15; cows, \$4.00@5.50; canners, \$2.00@2.50; bologna bulls, \$4.00@5.25.

HOGS-Local killing interests furnished strong support to the hog market this week and prices on better grades of butcher hogs strengthened 10@20c over middle part of last week although prices are fully that much lower than last week's close. However, light lights have shown no improvement and pigs are about 25c

lower.

Top soared to \$7.50 on Monday which was the week's high day but fell back to \$7.30 today. Bulk good hogs today brought \$7.10@7.25, 140@160-lb averages, \$6.25@7.00; good killing pigs, \$5.50@6.00; packing sows, \$6.15@6.25.

SHEEP—Although receipts show some enlargement, the lamb market has improved. Good lambs sold readily today at \$13.25 with top at \$13.50 with culls, \$6.50 or 50c higher than last week's close and 25@50c higher than the middle of last week. Sheep are unchanged, fat ewes, Sheep are unchanged, fat ewes, \$3.50@5.00.

OMAHA.

(Reported by U. S. Bureau of Agricultural Economics)

Omaha, Neb., July 2, 1924. CATTLE-Most grades of beef steers and the grain fed end of the fat she stock contingent reacted upward during the week, advances in most instances amounting to 15@25c. In spots there were considerable more upturns. Trade sentiment was decidedly better than a week earlier. Medium to good grade steers predominated. Choice heavies topped at \$10.35.

Bulls and veal calves sold unevenly higher, the latter gaining 50c or more. Stockers and feeders continued unusually scarce. Trade continuing on a normal basis largely. Weighty bologna bulls reached \$4.65 and better, and packers paid upward to \$9.60 for choice veal calves. The meager trade negotiated in stockers and feeders centered mostly around \$5.50@ 7.50 kinds.

> Order Buyers of Cattle Calves Hogs Lambs

Henry Knight & Son **Bourbon Stock Yards** Louisville, Ky.

References Dun & Brade

HOGS-Prices fell away rather sharply, a downturn of 15@25c being in evidence.

Top on Wednesday fell to \$6.85, the average price falling below \$6.50. Packing sows were fairly numerous. Mixed offerings were plentiful, comprising sows and light lights mostly. Weighty choice butchers early in the week topped at \$7.00.

SHEEP-Fat lambs came back emphatically, price advances amounting to 50c or more. Western range lambs comprised bulk of offerings, Idahos predominating.

bulk of offerings, Idahos predominating. Feeding lambs shared the upturn of fat kinds in a moderate way.

Firmness marked the outlook of fat sheep. As the week closed, best rangers were commanding \$13.85@14.00, some clipped new crop lambs making \$12.75. Yearlings shared the upturn shown by lambs, bringing \$10.00@11.40 on the rebound. Handyweight ewes sold upward to \$5.25 and above. Closely sorted feeding lambs were eligible to \$11.50, but a spread of \$10.75@11.25 took the bulk.

ST. JOSEPH.

(Special Letter to The National Provisioner.) St. Joseph, Mo., July 1, 1924.

CATTLE-Cattle receipts around 4,500 for two days this week. Market a little more active than last week with prices fully steady on all killing classes. Best steers averaging 1,166 pounds sold at \$10.00, with most sales \$7.75@9.00. Mixed yearlings ranged \$6.50@8.00.

Choice heifers sold up to \$8.00, with most sales \$5.50@6.50. A few choice cows sold \$6.50@6.75, but bulk of fair to good kinds sold \$3.50@5.00. Canners sold mostly \$2.00@2.25, with a few dozen to \$1.50, and cutters \$2.50@3.25.

Bulls sold mostly \$3.50@4.50, with a few up to \$5.50. Calves declined 50c, best selling at \$7.50.

HOGS-Hog receipts were liberal for two days, numbering around 21,600. Monday's trade held steady, while Tuesday values were 5@10 lower. The top Tuesday was \$7.20 and bulk of sales \$6.75@ 7.10. Packing sows sold at \$6.15@6.25.

SHEEP-Sheep receipts around 9,000 for two days. Receipts mostly Idaho lambs and feeders. Lamb prices 35@50 higher for the period. Idahos sold Tuesday at \$13.50, and natives ranged \$12.00@ 12.75.

Aged sheep steady. Best ewes sold at .00. Yearlings and wethers were scarce.

ST. PAUL.

(Reported by U. S. Bureau of Agricultural Economics and Minnesota Dept. of Agriculture.) So. St. Paul, Minn., July 1, 1924.

CATTLE-The local cattle market has reacted slightly after its recent declines, prices today on fat steers, yearlings and the better kinds of fat she stock looking unevenly 10@25c higher than last Wednesday. Much of the advance noted locally may be traced to the upturns at outside points as well as the light local receipts.

Best beeves on sale during the period were State University Farm yearlings which brought \$9.25 and \$9.75 while best weighty steers stopped at \$9.50. Bulk of fed steers and yearlings continue of a weight and quality to sell from \$7.00@ 8.50. Fat she stock holds to the \$3.50@ 6.00 levels for the rank and file while canners and cutters sell mostly at \$2.25@

Bologna bulls are mostly 15@25c higher bulk selling at \$3.75@4.25 with a few good heavies to \$4.50.

HOGS-The hog market is strong to slightly higher than at this time a week ago although in a slumpy condition at present. Desirable butcher and bacon hogs sold on Tuesday at \$6.65@6.85, packing sows \$5.75@6.00.

Receipts for the month of June totaled 258,000 showing a small increase over the record June run received last year. The average price of packers' and shippers' droves during June was \$6.58 compared with \$6.96 for May and \$6.38 a year ago.

SHEEP-Bulk of the fat native lambs sold Tuesday at \$12.00@13.00, culls mostly \$7.00. Sheep receipts were light, fat ewes selling largely at \$3.50@5.25.

MAXWELL and SON

Order Buyers

Cattle, Hogs, Sheep and Calves

> Buffalo Stock Yards BUFFALO, N. Y. Phone Jefferson 2302

KENNETT-MURRAY

Order Buyers — Live Stock

Offices at Ten Markets

P. C. Kennett & Son Louisville

P. C. Kennett & Son Nashville

P. C. Kennett & Son Montgomery

Kennett Sparks & Co. E. St. Louis

Kennett Murray & Co. LaFayette

Kennett Murray & Darnell Indianapolis

Kennett Colina & Company Cincinnati

Kennett Murray & Colina Detroit

Kennett Murray & Brown Sioux City

Kennett Murray & Company Omaha

PACKERS' PURCHASES.

Purchases of livestock by packers at principal centers for the week ending Saturday, June 28, are reported to The National Provisioner as follows: CHICAGO.

Armour & Co 4,463	Hogs.	Sheep. 11.496
Swift & Co 5,499	20 100	21,724
36	20,100	
Morris & Co 4.152	18,000	8.200
Wilson & Co 4.083	18,000	5.846
Anglo-American Prov. Co 678	7 200	
G. H. Hammond Co 2.577	11,400	
Libby McNoill & Libby 750	,	

Brennan Facking Co., 7,700 hogs; Miller & Hart, 8,000 hogs; Independent Packing Co., 9,800 hogs; Boyd, Lunham & Co., 10,500 hogs; Western Packing & Provision Co., 15,600 hogs; Roberts & Oake, 7,700 hogs; Others, 25,400 hogs.

KANSAS	CITY.		
Armour & Co 2,400 Cudahy Pkg. Co 2,403	2,058 1,592	Hogs. 9,765 7,034	Sheep. 4,643 6,911
Fowler Pkg. Co. 455 Morris & Co. 2,239 Swift & Co. 2,777 Wilson & Co. 2,478 Local butchers 804	1,847 1,436 246 250	6,111 11,138 9,783 1,364	2,989 4,184 3,848 93
Total13,551	7,423	45,195	22,668

OMAHA			
	Cattle & Calves.	Hogs.	Sheep
Armour & Co	3,528	19.056	7.68
Cudahy Pkg. Co	4.850	18,627	7,85
Dold Pkg. Co	894	9.418	
Morris & Co	2.004	10.115	2,79
Swift & Co	. 4.389	16,693	7.77
Hoffman Pkg. Co	70		.,
Mayerowich & Vail	75		***
Mid-West Pkg. Co.	73		
Omaha Pkg. Co	. 53		
John Roth & Sons	134		
S. Omaha Pkg. Co.	128		
Lincoln Pkg. Co	154		
Nagle Pkg. Co	153		
Sinclair Pkg. Co	192	****	***

Total17,011	94,191	26,103
ST. LOUIS,		
Cattle & Calves.	Hogs.	Chan
Armour & Co 2,928	8.280	Sheep. 3,803
Swift & Co 3,878	11.619	4.192
Morris & Co 653	7.563	1,948
St. Louis Dressed Beef Co 1,012		
Independent Pkg. Co 543	450	
East Side Pkg. Co 625	4,301	116
Heil Pkg. Co 22	913	
American Pkg. Co 27	570	55
Krey Pkg. Co 85	****	
Sieloff Pkg. Co 10		25
Butchers 9,496	22,948	2,089
Totals	56,664	12,408

ST.	JOSEP	Ħ.		
	Cattle.	Calves.	Hogs.	Sheep.
Swift & Co	1.951	338	19,258	8,570
Armour & Co	1,346	196	12,033	3,036
Morris & Co	1.142	414	9,416	1.129
Others	3,185	173	12,707	811
Total	7,624	1,121	53,414	13,546

	Cattle.	Calves.	Hogs.	Sheep.
Cudahy Pkg. Co	. 2,663	109	21.321	103
Armour & Co	. 2,440	67	18,803	189
Swift & Co	. 1,512	36	7.362	60
Sacks Pkg. Co	. 38	68		
Smith Bros. Pkg. Co	. 12	14	6	
Local butchers	. 67	34	• • • •	
shipments	. 1,664		19,467	
Total	. 8,396	328	66,959	252

				•		K	1	L	1	L	E	F	OMA (CITY.		
Morris Wilson Others	å	Co.											774 938	976 861 38	Hogs. 1,234 1,346 350	Sheep. 439 10
Total				٠	٠	۰							1,809	1,875	2,930	449

INDIA	NAPO	LIS.		
		Calves.		Sheep.
Eastern buyers Kingan & Co	1 977	2,814 458	27,195 $21,744$	1,189
Moore & Co	2,200	100	4.199	
Indianapolis Abat. Co	553	84	2,004	115
Armour & Co	109	53	1,919	41
F. Heigelmeir & Bros	3	****	990	
Brown Bros	206	15	****	
Bell Pkg. Co	84		550	
Schussler Pkg. Co	19	4	336	
Meier Pkg. Co	81	9	215	
Indianapolis Pkg. Co	****	10	310	****
Wabritz Pkg. Co Riverview Pkg. Co	12	96	282	13
Miscellaneous	856	133	282	207
Total	5,221	3,674	60,113	2,285

	ST. PA	UL.		
Armour & Co	Cattle.	Calves.	Hogs, 20,983	Sheep 75
Hertz & Rifkin Co Katz Pkg. Co	. 118	84 347	****	2
Swift & Co	2,455	6,639	31,219 8,043	77
Total	4.000	11 493	60 245	1.50

WI	CHITA			
	Cattle.	Calves.	Hogs.	Sheep.
Cudahy Pkg. Co Dold Pkg. Co Local butchers	216	340 32	7,133 6,088	284
Local butchers	104	****	****	****
Total	803	372	13,221	305
	NVER.			
Swift & Co	636 374 186 568	348 49	4,028 3.661 891 1.079	370 453 12 224
Anscenaneous	900		1,018	202
Total	1.764	450	10.659	1.059

RECAPITULATION. Recapitulation of packers' purchases by market for the week ending June 28, 1924, with comparisons:

	CATTLE.	
	June 28.	Prev. Cor. week, week. 1923.
Chicago	22,205	25,908 29,086
Kansas City	13.551	18,908 20,709
Omaha		25,731 23,864
St. Louis	19,279	25.233 23,407
St. Joseph		8.818 8.911
Sioux City	8,396	10,602 7,847
Oklahoma City	1.809	2,803 2,937
Indianapolis	5.221	4.863 5.016
Cincinnati		1,282 1,783
Milwankee		1,350 1,617
Wichita		965 859
Denver	1.764	
St. Paul		5,686 6,098
		,

HOGS.		
Week ending June 28.	Prev. Co	or. week, 1923.
Chicago	149.100	189,100
Kansas City 45.195	42.131	84,227
Omaha 94.191	107,115	87.383
St. Louis 56.664	71,323	49,481
St. Joseph 53.414	51.991	51.910
Sioux City 66.959	75,606	99,448
Oklahoma City 2.930	5,465	4,297
Indianapolis 60,113	54,652	54,991
Cincinnati	17.005	12,997
Milwaukee	6.088	7,190
Wichita 13.221	20,332	9,251
Denver 10.659		
St. Paul 60,245	58,102	60,133

SHEEP.	
	Prev. Cor. week, week. 1923.
47.266	61,271 35,946
22.668	22.301 10.941
26.103	33.664 30.759
12.408	27.677 18,083
13.546	12,916 12,948
	335 504
	190 161
	2.600 3.274
	932 1.843
	521 485
	44444
1,566	1,511 1,355
	Week ending June 28. 47.286 22.668 26.103 12.408 13.546 252 449 2,285

CANADIAN LIVESTOCK PRICES.

Summary of top prices for livestock at leading Canadian centers for the week ending June 26, 1924:

BUTCHER STEERS. 1,000-1,200 Lbs.

	ended June 26.	week 1923.	ended June 19.
Toronto	. 7.50 . 7.50 . 6.75 . 6.25	\$ 8.00 8.25 8.25 8.25 6.25 6.50	\$ 8.25 7.75 7.75 6.50 6.25 6.00
VEAL C	ALVES.		
Toronto Montreal (W) Montreal (E) Winnipeg Calgary Edmonton SELECT BA Toronto Montreal (W) Montreal (E) Winnipeg	. 8.00 8.00 . 8.00 . 7.00 . 5.50 CON HOG . 9.90 . 9.00	\$10.00 8.00 8.00 9.50 8.00 6.00 \$S. 9.46 10.50 10.50 9.62	\$11.00 8.00 8.00 7.50 5.50 9.50 8.75 8.75 7.81
Calgary	. 7.42	8.80	7.42
Edmonton	. 7.40	9.60	7.25
GOOD I	AMBS.		
Toronto Montreal (W) Montreal (E) Winnipeg Calgary Edmonton	. 15.00 . 15.00 . 17.50 . 13.50 . 12.00	15.50 15.00 15.00 13.50 12.00 13.00	17.00 17.00 17.00 17.00

SIOUX CITY HAD 2,000,000 HOGS.

The Sioux City, Ia., stockyards recently passed the two million mark in the number of hogs marketed there in less than six months. This figure was reached earlier than ever before on that market

With this record, the Sioux City yards reached fourth place in hog marketings during the month of June, being led by Chicago, East St. Louis and Omaha, in the order named.

RECEIPTS AT CENTERS.

ALCONITIO III			U.
SATURDAY, JUN	IE 28,	1924.	
Chicago	Cattle.	Hogs. 6,000 3,500	gneep.
Chicago Kansas City Omaha St. Louis St. Topsoph	500 300 300 500 100 300	6,000 3,500 2,500 5,000 6,000 12,000 900 100	3,000 300 300
Omaha	300	2,500	300
St. Joseph	100	6,000	1,200
	300	12,000	
Oklahoma City	200 300	100	*****
Fort Worth	300		
St. Paul	200	300	1.000
Denver Louisville Wichita Indianapolis Pittsburgh Cincinnati	200 .100 100 300	100 300 1,000 400 6,000 2,000 3,100 2,000 2,000 900 100	1,000 500
Wichita	100	400	100
Pittsburgh	100 200 100 200	2,000	100 200 600 200 300
Cincinnati	200	3.100	600
Buffalo Cleveland Nashville, Tenn. Toronto	200	2,000	300
Nashville, Tenn	200	900	100
Toronto	200	100	*****
MONDAY, JUNI Chicago It Kansas City It Chmaha It Louis St. Louis St. Joseph Sioux City St. Paul Okiahoma City Fort Worth Milwaukee Denver	E 30,	1924.	
Chicago1	4.000	53,000 16,000 21,000 14,000 10,000 13,000 15,000 900 800 700	17,000 6,000 12,000 3,000 2,500
Come he	8.400	21,000	12,000
St. Louis	4,000	14.000	3,000
St. Joseph	3.300	10.000	2,500
St. Paul	2.800	15,000	300 200
Oklahoma City	400	900	300
Milwankee	2,500	700	
Denver	2,500 200 1,800 700	1,300 2,300	7,000 2,500
Louisville	700		2,500
Indianapolis	1,500	9,000	100
Pittsburgh	1,300	1.600 9,000 8.000 4.000	1,600 700
Buffalo	1.500	14.000	800
Cleveland	700	5.500	800 800 300
Nashville, Tenn	1 800	14.000 5.500 1,900 1,600	900
Louisville Wichits Indianapolis Pittsburgh Cincinnati Buffalo Cleveland Nashville, Tenn. Toronto	2,000		000
TUESDAY, JUL		1924.	
Chicago	1.000	42,000	12,000 6,000 8,500
Omaha	4.600	23.000	8,500
St. Louis	5.000	21,000	4,000
Chicago	6,500 4,600 5,000 2,200 2,500 1,200 700	42,000 14,000 23,000 21,000 8,000 18,000 9,000 400 500	4,800
St. Paul	1,200	9,000	200
Oklahoma City	700	400	
Milwaukee	1,600 400 300	1.500	100
Denver	300	4,100	100 300 3,000
Wichita	500	500	3,000
Indianapolis	500 1,200 100 500 100	1,500 1,500 4,100 1,700 500 15,000 1,000 5,800	300
Pittsburgh	500	5.800	300 2,100 400 300
Buffalo	100	2.000	400
Cleveland	200	5.800 2.000 2.000 1,500	200
Buffalo Cleveland Nashville, Tenn. Toronto Ho	liday		
WEDNESDAY, J		1924	1
Chloren	0.000	36 000	15 000
Chicago	4.000	36,000 12,000 20,500 18,000 10,000 24,000 16,500 300 2,000 800 10,000 3,000 7,000 3,200 3,000 3,200 3,000	15,000 4,000 11,000 3,000 1,500 100 400
Kansas City Omaha St. Louis St. Joseph Sioux City St. Paul Oklahoma City Fort Worth	5,000	20,500	3,000
St. Joseph	900	10.000	1,500
Sioux City	2,500 900 2,500 1,500 600 3,200 300	24.000	100
St. Paul Oklahoma City Fort Worth Denver Wichita Indianaryolis	600	500	400
Fort Worth	3,200	300	300
Denver	300	2,000	2,500
Indianapolis	800	10.000	400
Wichita Indianapolis Pittsburgh Cincinnati Buffalo	300	7,000	2,500 100 400 3,000 2,500 200 500
Buffalo	100 200	3,200	200
Buffalo	200	3,000	500
THURSDAY, JU	LY 3.	1924.	
		Hogs	Sheep. 13,000 2,000 5,500
Chicago Kansas City	5,000 1,000	27,000	13,000
Omeha	1.000	12,500 8,000 5,500 14,000	5,500
Omaha St. Louis	1,000	8.000	600 900
St. Louis St. Joseph Sioux City St. Paul Fort Worth	500 400	5.500	
St. Paul	1.800		100
Fort Worth	1,200	1,300 2,700 7,000 300	
Denver	200	7,000	200
FILLSDUIGH	2000	2,800	300 1,300 400 300
Cincinnati	200 100	3,000	400
Cleveland	200	3,000 4,000	300

Holiday—No market. NEW YORK LIVESTOCK.

FRIDAY, JULY 4, 1924.

Receipts for week ending Saturday, June 28, 1924 are as follows:

	Cattle.	Calves.	Hogs.	Sheep.
Jersey City New York		9,286	7,636 15,826	23,534
Central Union		1,938	259	4,139
Total	8,256	15,099	23,721	27.677
Previous week	9,438	15,175	28,439	38,366

What are the temperature requirements in the hide cellar? How do temperatures affect shrinkage? Ask THE BUE BOOK, the "Packer's Encylopedia."

HIDE AND SKIN MARKETS

(SHOE AND LEATHER REPORTER)

Chicago.

PACKER HIDES—Three packers participated in a large movement of hides at half a cent above the recent movement of 50,000 hides. About 125,000 hides sold, cleaning most all brands to July first. All sellers moved 41,500 native steers at 12½c, one seller booked 7,500 heavy Texas at 12c; three sold 13,500 butts and two moved 23,000 Colorados. Three killers booked 35,000 branded cows and one accepted 10½c for 3,500 light cows. Prices ruling early in the week as asking levels were obtained. Natives moved at 12½c; Texas and butts realized 12c; Colorados sold for 11c and branded cows went at 9c. No heavy cows were sold but moved sparingly as noted yesterday at 10½c. The light cows noted above realized 10½c. Nothing transpired in bulls which last sold at 8c for natives and 6½c for branded. The small packer situation remains quiet with only one lot of June slaughter, about 10,000, unsold and held for 10½c firmly in view of the strength shown in the packer light native cow situation today.

COUNTRY HIDES—There is little change in sentiment in country stock. Action is limited because of the different views of buyers and sellers. Offerings are scarce from the local and outside dealers. Demand is not pressing. Sellers feel more sure of their position on the market today in view of the reaction effected in packer hides. Patent leather tanners continue to manifest the greatest amount of interest and only in the light lines. There is a meager domestic call for buffs and some nosing around by foreign interests at low levels for the qualities involved. Asking prices by sellers in this market are quite strong, as much as a cent above the bid basis in some instances. Outside sellers are also inclined to value their materials highly, but not to the extent of local traders. All weight hides in the originating sections are rated at 7½@/
8c delivered basis with little material on sale and holders inclined to spring the outside level a trifle. Heavy steers here are quiet and nominal about 10c; heavy cows and buffs list at 8@8½c asked as the general rule with sales at 7½@/7½c recently for winter haired and grubby lots as to percentages. Extremes list at 10@ 10½c bid by tanners of side leathers for the ordinary current receipts. Branded country stock ranges at 6½@7c flat nominal and country packer goods at 7½c@8½c asked flat and selected as to sellers, sections and descriptions. Bulls have been selling at 6½@7c for country run with most of the business of late at the inside figure. Country packer bulls range at 7@ 7½c and glue hides have been selling at 5@5½c range.

CALFSKINS—Despite the action in other varieties of stock, calfskins remain rather passive. Tanners manifest very little interest as asking rates are above their views for the most part. There are not any large accumulations noted in this section and asking rates apparently are firm. Packers are sold out with the exception of one car of Junes which is held for the export paid basis of 21½c. Domestic buyers consider 20c nearer their ideas. City calfskins continue offered in limited supply at 19c the previously paid basis, at which level considerable stock moved, thereby supplying buyers needs for awhile to come. Some tanners have been buying in the choice outside sections where prices are more to their liking, picking up first salted skins at 18@18½c. Several cars of Ohio, Penn., Minn., Wis. cities sold in that range and one car realized 19c. Resalted parcels are quoted unchanged at 16@17c for cities and mixed country run

at 14@16c. Deacons are not in as great favor as formerly but are held unchanged at \$1.15@1.25; Stocks are not large, and receipts are dwindling. Kipskins are quiet. Sellers are endeavoring to interest tanners in these skins which are growing in size. Packers ask 16½c but would consider loc straight through. Tanners wish to purchase the southerns which comprise over half the holdings, at a cent discount. Outside descriptions 12@14c nominal.

MISCELLANEOUS MARKETS—Dry hides show no change being steady about 14c, a recently paid basis for all weight westerns. Horse hides are still rather friendless and listed \$3.75@4.00 for business and \$4.25@4.50 talked. Packer lambskins are quiet at \$1.00@1.25 range for 7@9 lbs. avg. stock coming now. Shearlings are available at 90@95c in packer slaughter while small killer goods rate at 70@80c. Dry pelts are well sold out and quoted 28 @32c. Pickled skins are quoted unchanged at \$6.50@9.00 dozen; hogskins 15@30c nominal.

New York.

PACKER HIDES—Further quiet business is rumored in city slaughter stock with details closely guarded. About 1,500 June native steers sold at 11½c. This is a new price and half a cent under prior business, but in line with the western decline. Close to 6,000 butts and Colorados sold earlier in the week at 10½@9½c respectively; cows have been selling at 9½c and bulls are quoted at 7½c nominal.

OUTSIDE PACKER HIDES—The understands

OUTSIDE PACKER HIDES—The undertone to the situation is easy in line with the recessions recently established in the big packer market. Business is relatively small. Some June, July small packer native steers sold at 11c and a couple of cars of native cows made 9½c. Bulls are held up to 8c and sold as low as 7c for mixed city and country packer stock.

city and country packer stock.

COUNTRY HIDES—The situation is still a trifle easy in tone. Car Penn, extremes 25@50 lbs. 25% grubs sold at 9½c. Some choice northern section southern extremes in weights 15@50 lbs. sold at 10½c flat. Ordinary southern extremes rate at 8@9½c flat as to description and section and similar light hides are available at 10 @10½c with the outside usually asked. Buyers talk nothing over the inside figure. Western lights rate at 9½@10c with outside asked and inside bid. Heavy hides 7½ @8c nominal.

CALFSKINS—New Yory city calfskins are featureless. Three weights quoted \$1.57½@2.17½@3.07½ lately paid. Outside skins are quoted unchanged at \$1.35@1.50 range on lights. Foreign skins are strong. Moderate quantities Polish skins selling at \$1.20 d. and f. 25,000 Southern calf sold at \$1.27½ for 8 lbs. down and weights 8@15 lbs. made 14½ flat. Several cars southern kips sold 11½@12c flat.

FOREIGN WET SALTED HIDES—The situation in frigorifico stock has turned inactive, more from lack of material than from any desire on buyers part to quality coming forward and the easiness in domestic sole leather hides. July slaughter, representing mid winter take-off has not as many friends as earlier kill which doubtless accounts for the slowness of stock at the moment. Last sales in June kill of Argentine steers were at 1234c and in Montevideo types at 1334c for export while home tanners paid up to 13c and 14c respectively. Cows quoted up to 11c lately realized. Type hides have been quiet of late but recent business was at full comparative basis with the standard descriptions. About 2,000 B. A. Hillia Aldao type hides, 1/3 steers held at 123/cc; bids of 11c refused for type Rosario cows and 8 7/16 for campos Santa Fe cows.

SLAUGHTER REPORTS.

Special report to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending June 28, 1924:

CA	TTLE		
Wee	k ending	Co	or, week
		Prev. week.	1923.
Chicago	22,205	25,908	29,086
Kansas City	20,974	25,786	27,039
Omaha	14.185	24,281	22,673
E. St. Louis	14,126	17,788	13,967
	5,527	7,654	6.891
St. Joseph	7.193	8,916	7,441
Sioux City	813 .	887	
Cudahy	7.393		1,051
Fort Worth		8,610	0.740
Philadelphia	1,876	2,010	2,142
Indianapolis	1,473	1,376	1,412
Boston	1,472	1,557	1,118
New York & Jersey Ctly	8,764	9,820	8,537
Oklahoma City	3,684	4,510	
H	OGS		
Chicago	75.400	149,100	155,600
Kansas City		42,131	34,436
Omaha	72,820	79,437	62,899
E. St. Louis	46.857	43,237	48,786
St. Joseph	39,936	35,154	45,609
Sioux City	48,898	46,612	37,923
	22,353	22,005	18,129
	19,510	19.324	15.845
	3,748	3,606	,
Fort Worth	15.426	17.054	16,609
Philadelphia	30,352	28,904	30,073
Indianapolis		16,749	21,152
Boston	24,408	44,139	39,902
	40,654		
Oklahoma City	2,930	5,465	*****
SE	TEEP		
Chicago	47,206	61,271	35,946
Kansas City	22,668	22,301	19,989
Omaha	27,130	31.622	28,254
E. St. Louis	11,264	24,588	15,511
St. Joseph	12,735	11,855	10.925
Sioux City	374	442	909
Cudahy	312	208	229
Fort Worth	5,504	8,554	
Philadelphia	3,726	5,998	5.822
	660	1.015	534
Indianapolis	6.311	4.733	8,226
New York & Jersey City		40,619	40,496
	449	190	20,200
Oklahoma City	****	200	

CHICAGO HIDE QUOTATIONS.

Quotations on hides at Chicago for the week ending July 5, 1924, with comparisons, are as follows:

PACKER HIDES.

July 5	nding We	ck ending (me 28, 24.	orresponding week 1923.
Spready native steers 14	@14%c 1	4 @14%c	@16c
Heavy native	@12e 1	2¼@12½e	@14c
Heavy Texas	@12c	@12e	@12%c
Heavy butt branded	@12e	@12e	@12%0
Heavy Colorado			-
Ex-Light Texas	@11c	@11c	@11%c
steers Branded cows .	@ 9c @ 9c	@ 9c @ 9c	914@10c @ 914c
Heavy native	@10%c	@10%c	
Light native			
Native bulls	@ 10%c @ 8c	@101/se @ 8c	101/4 @11c 91/4 @10c
Branded bulls 61 Calfskins 201	6@21c 2	614@ 7c 2014@21c	9 @ 9% o 17 @18c
Slunks, regular.	@1642c @1.25	@1646c @1.25	1.15@1.20
Slunks, hairless Light, Native, But	@40c ts. Colors	do and Te	35@75c
per lb. less than h	eavies.		

CITY AND SMALL PACKERS.

Week ending Week ending Corresponding July 5, '24, June 28, 24, week 1923.

Nativesall weights 10 @10%c		101/2@11c
Bulls native @ 816		
Branded hides . 8 @ 840	@ 8140	914@10c
Calfskins @18c	@18e	16 @16%0
Kip	@15e	13 @131/c
Light calf\$1.50@1.60	\$1.50@1.60	\$1,30@1.35
Slunks, regular. \$1.50@1.60		\$1.00@1.10
Slunks, hairless		
Vo 1 95 @40e	35 @40e	35 @70c

COUNTRY HIDES.

	Week ending July 5, '24.	Week ending June 28, 24.	Corresponding week 1923.
Heavy steers	. 81/2@ 9c	814@ 9c	10 @11c
Heavy ocws.		71/2@ Sc 71/2@ Sc	9 @ 91/4c 9 @ 10c
Extremes	91/20101/40		10 @11c
Bulls		614@ 7c	8 @ 814c 8 @ 814c
Calfskins	131/2@141/40	13%@14%	13 @14c
Kip	11 1/2 @12 1/4 c	\$1.15@1.25	12 @13c \$1,20@1,25
Deacons	\$1.00@1.10	\$1.00@1.10	\$1.00@1.18
Slunks, regula	ess\$0.25@0.30	\$0.90@1.00 \$0.25@0.80	\$0.60@0.75 \$0,25@0.30
Horsehides .	\$4.00@4.50	\$4.00@4.50	\$3.50@4.50 \$0.20@0.25
Hogskins	\$0.25@0.34	\$0.20@0.00	\$0.20@0.20

SHEEPSKIN

	Week ending July 5, '24.	Week ending June 28, 24.	Corresponding week 1923.
Large	packers. \$2.50@3.00 packers. \$2.50@3.00	\$2.50@3.00 \$2,50@3.00	\$3.00@8.25 \$2.75@2.90
Pkrs.	shearl'gs.\$0.90@0.95	\$0.75@0.90	\$1.00@1.021/
	ry pelts.\$1.50@2.00	\$1,50@2.00 \$0.28@0.32	\$1.50@2.00

ICE AND REFRIGERATION

ICE NOTES.

The Eugene Crystal Ice & Storage Company has been incorporated in Eugene, Ore., with a capital stock of \$20,000 by Mac McLean, C. L. Campbell, and George N. McLean.

Joseph M. Doernberg has sold a two-thirds interest in the Manhattan Ice & Cold Storage Company, Manhattan, Kans., to Alden F. Huse.

The plant of the Meridian Produce and Cold Storage Company, Meridian, Idaho, was recently completed and is ready for business.

The Utah Ice and Storage Company, Salt Lake City, plans to erect a three-story warehouse in Provo, Utah.

H. C. Doup plans to install an ice plant in North Little Rock, Ark.

The plant of the Bowton Ice Company,

Farmington, Ill., has been remodeled and enlarged.

A new ice plant has been opened in Pine Bluff, Ark., by the City Ice Company.

The Bunceton Ice Company, Bunceton, Mo., has been sold to Walter Johnson.

The Nevada Coal and Ice Company plans to make considerable improvement in its plant at Nevada, Mo.

The Hico Ice Cold Storage Company, located at Hico, Tex., has purchased property at Glen Rose, Tex., and will erect a cold storage plant.

The plant of the Home Ice Company, Depew, Okla., has been remodeled and new equipment has been installed.

The Hygea Ice Company has been incorporated in Monmouth Beach, N. J., with a capital stock of \$10,000 by Charles L. and Bessie F. Presley and Wm. L. and Hazel C. Blizzard.

ICE RESEARCH BUREAU.

A research bureau to study and analyze problems in ice manufacture, marketing, and the furthering of various uses for ice has been started by ice manufacturers in New Orleans, La. A campaign of intelligent advertising to acquaint the general public with the facts concerning the vast importance and necessity of ice will be one the first steps undtertaken by the new bureau.

EXHIBITION POSTPONED.

Announcement was made recently that the International Dairy and Refrigerating Machinery Exhibition, which was scheduled to be held in Buenos Aires, Argentine, has been postponed until September. Detailed information can be secured from the office of the Argentine-American Chamber of Commerce, 89 Broad Street, New York City.

MEAT TRADE AROUND WORLD. (Continued from page 23.)

to the railways, where they are registered in the mass without subdivision into Siberian and Mongolian, and thereupon taken by train to the West, into European Russia.

Here the Mongolian breed is sorted out from the Siberian, and judging from the data of the cattle markets in Moscow as well as in Petrograd, Mongolian cattle, from year to year, enter to a larger percentage into the total of "Siberian" cattle which are feeding the capitals. One can be sure that in the near future the role of Mongolian cattle on the markets of the chief centers of European Russia will become more important.

This determines the direction which the evolution of the Siberian cattle-breeding industry will take. This evolution tends, under the pressure of economic forces, to an unconscious specialization on the part of Siberia in milk-cattle breeding, which has resulted in the exportation of To Siberian butter on a gigantic scale. produce butter is much more profitable than to produce meat. This advantage is increased by the fact that the cost of transportation over the long distances which separate the Siberian farmer from his market, is much higher on the first class of products (butter, etc.) than on the second. And butter is two or three times as dear as meat.

Siberian Butter Export.

The export of butter from Siberia is the result of local railway construction, and the happy thought of using refrigerator cars. In proportion, as the network of railways is extended, there will arise new butter-making districts; these will creep along, as it were, in the direction of the rails, little by little conquering the whole of the region now given over to extensive steppe-meatcattle breeding.

Such a growth of the Siberian butter production must be welcomed, inasmuch as we can see that the old inhabitants and also the newly established Siberian villages, are getting rich by it. Thus meat production in Siberia, even if not

No Weakness Can Hide from the BUZZ SAW

If a sheet of Novoid Pure Corkboard were not baked through the centre, to liberate the natural gum which is necessary to securely cement the cork granules to-gether, the Buzz Saw would reveal it instantly—and into the scrap heap it would go. For this corkboard is moulded and baked in 24" sheets, 4" thick, then sawed through the centre for 2" thick sheets and again sawed in half to make sheets 12" wide. Thus the *inside* of the sheet, when baked, is exposed in



NOVOID CORKBOA

That safeguards you against weak sheets of corkboard-sheets without proper structural strength to withstand freezing, thawing and rough handling.

No other corkboard is cut from larger sheets. Hence no other make gives you

No other corkboard is cut from larger sheets. Hence no other make gives you the positive, visual evidence of durability.

The labor cost of installing is the biggest cost of insulation. And it costs no more to install Novoid than Corkboard which will disintegrate quickly.

We've some other interesting facts to tell you.

Write for full information and prices

CORK IMPORT CORPORATION

345-349 West 40th St., New York City Branches in large cities.



Don't Delay Be Practical

Save time and labor and get better results for your refrigerating requirements by installing



MECHANICAL REFRIGERATION

Forty years of cumulative knowledge is built into every Frick installation. Write for list of users in your vicinity—inspect some of the plants and talk to some of the owners. It will pay you to investigate.

Send for a copy of our booklet "Ice and Frost" by Jack Frost himself.



Pittsburgh, Atlanta, G

DISTRIBUTORS:

curtailed, will not in any case keep pace with the increasing demand and this must necessitate the development of meat exportation from Mongolia.

During the 12 years, on an average, that the Siberian cow can be used for milk production, the Mongolian cattle raiser can make a profit by selling 4 to 5 year old cattle from his herds after ceasing to give milk. A 12 year old cow yields a poor quality of meat for a less exacting market; such meat is distributed somewhere in the back-yard of the world's market and it is in no way goods with which Siberia can command a place in the market.

And Mongolia, not going over to milk cattle-breeding, will make during the 12 year period three or four turnovers with the cattle fattened for slaughter on the same fodder that would be required for the subsistence of one milk cow.

Sheep Breeding in Siberia

What about Siberian sheep-breeding? In Siberia in the year 1914 there were about 285 million sheep, which were used especially for tallow and wool. In the future with increasing facilities for the exportation of mutton (cold transport), the latter will go from Siberia into Russia and West Europe and the evolution of Siberian sheep-breeding will receive a meat-wool direction and undoubtedly will play a prominent role in the Russian, and West European market. European market.

At the same time, by reason of the development of the milk producing industry, Siberian sheep-breeding will retreat to the districts suitable only for it—saline steppes with poor vegetation and of little value for cultivation. As a result of these conditions, Siberian sheep-breeding will diminish.

ditions, Siberian sheep-breeding will diminish.

The mutton, just as the beef of Siberia, will not satisfy the demand of the European markets and there will remain enough room also for Mongolian mutton and the competition of the Siberian sheep does not menace it at all.

Are there also in Mongolia transport conditions which would make the butter industry more profitable than raising cattle for meat? If Mongolia were intersected by railways and if the whole natural trend of Mongolian life were not opposed to it, then it is probable she could develop her butter-making industry.

But within any reasonable length of time there will be no railways in Mongolia for the reason that the cost of construction would not be redeemed by the income from freights. Without any efficient railway service the export of butter from Mongolia is impossible; therefore

ter from Mongolia is impossible; therefore the development of local butter-making is impossible.

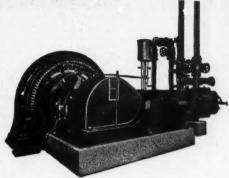
A Meat Reservoir.

A Meat Reservoir.

By the time railway construction becomes feasible in the Mongolian steppe the price of meat will probably be so high everywhere, that there will be no commercial interest for Mongolia to start on butter-making. It will be more profitable for this country to forever play the role of one of the few world reserves of meat and wool.

In fact, the gigantic development of modern cities and our civilization in general, expressing itself, among other ways in the growth of the world demand for cattle products, has created huge cattle-breeding industries in new countries—Argentina, Australia, New Zealand. And in these countries we can see that the districts with differences in branches of cattle breeding are very distinctly divided. Here we see a new and very large area of high-plateau land, viz., Siberia and Mongolia (which latter country is, from an economic point of view, closely connected

economic point of view, closely connected



300 ton direct connected Electric Driven De La Vergne

De La Vergne Ice & Refrigerating Machines

De La Vergne high speed hor-izontal machines have been in actual use longer than any other design. The patented auxiliary suction port is a great advantage, not only increasing the efficiency but insuring per-fect lubrication.

De La Vergne medium and low speed machines are also offered to suit any requirements.

Send for our bulletine

De La Vergne Machine Company

931 East 138th St.

New York City

Branch Offices:

Los Angeles, Cal. Mexico City, Mexico Buenos Aires, Arg., S. Am. Tampa, Fla.

By the Scientific Method of Air Conditioning

A Product of Unparalleled Quality



is assured day in and day out regardless of outdoor weather conditions.

We design, manufacture and install complete equipment for all branches of air conditioning and Brine Spray Refrigeration in Packing Houses and invite correspondence prior to consultation and service.

The Successful Systems are Webster Systems

ATMOSPHERIC CONDITIONING CORPORATION

Singer Bldg., New York

Lafayette Bldg., Philadelphia

Monadnock Block Chicago

STEVENSON'S 1922

"Man Size" Door Closer

stops the loss-the outflow of dry cold air, the ruinous inflow of warm moist air-at unclosed doorways.

Size No. 1 (29½ in.) \$9.50 No. 2 (23½ in.) \$8.50 Prices F. O. B. Chester

State size of doors, Whether right or left hand. Whetherdoor and frame are flush.

Cut shows right hand door closer, No. 1 size, 29½ in. long. Its spring—No. 1 guage wire 9/32 galvd.—wound very open so ice and rust cannot clog it. Made in two sizes, and for both right and left hand doors.

There's only one way to greater economy-shall we tell you about it?

Stevenson Cold Storage Door Co.

1511 West Fourth St.

Chester, Penna.

Cold Storage Insulation All Kinds of Refrigerator Construction JOHN R. LIVEZEY

Glenwood Avenue West of 22nd St.

PHILADELPHIA, PA

We make a Specialty of

STOCKINET **Meat Covers**

For Hams and Other Meats

Write for Quotations on your Requirements

Musgrove Knitting Co. **Pittsfield**

with the former) transformed into sources of supply for cattle products, yet remaining, acording to the character of their production, strictly divided.

Not an Agricultural Country.

Not an Agricultural Country.

But, perhaps Mongolia will change into an agricultural country and the plough will drive away the sheep and the cow? This is doubtful. Neither the climatic conditions nor the nature of the soil in Mongolia are suitable for agriculture with the exception of few river valleys where regular cereal growing is possible. In Mongolia, the raising of cattle, sheep, camels and horses will remain the chief occupation of the population. occupation of the population. There are no statistics for all Mongolia

as to the number of cattle and the different figures which are given by different authors are based on their personal impressions and are therefore merely guesses. In the year 1911 it happened that I had

to take a census in a place near the town of Urga in Mongolia, which I could not conclude definitely on account of a lack of any true knowledge on the part of the

Mongolian proprietors themselves regarding the number of head in their herds.

Hard to Count Stock

Hard to Count Stock.

More or less exact calculations have been made in Eastern Mongolia in the provinces of Selingolm, Chjerim, Djoudos and Chjalatus. In these districts of Mongolia a part of the lands suitable for agriculture is already occupied by Chinese colonists, but in the still untouched steppe, typical Mongolian cattle-breeding still continues. In the Selingolm province it has been roughly calculated that there are 1,900,000 head of cattle, 700,000 horses, 2,000,000 sheep, and more than 300,000 camels; in 10 districts of the principalities of Chjerim it is claimed there are 580,000 head of cattle, 1,400,000 sheep, and 350,000 horses; in 11 districts of the Djoudos province the numbers are said to be 875,000 head of cattle, 1,220,000 sheep and 125,000 horses.

province the numbers are said to be 875,000 head of cattie, 1,220,000 sheep and 125,000 horses.

To apply the above figures to all the provinces of Mongolia would give an enormous number of animals. And one cannot, therefore, take seriously the following figures put forward by one author as representing the total number of stock in Mongolia: 18 million head of cattle, 28 million head of sheep, 3 million horses, 2½ million camels. Mongolia, I emphasize, is and in the visible future will continue to be a big reserve land of cattle, meat, fat, hides, sheep-skins, wool, camel hair, etc. The fleece alone from the goat-skins of Mongolia gave to the importers of Germany and the United States receipts equal to the cost of all the goat-skins on the Mongolian market. By developing the export of cattle products from Mongolia, by standardising the sorting and finishing, the Russian industry could in time make a very profitable business, but it has lacked solid organization, which can be given only by enterprises with means as well

a very prohiable business, but it has lacked solid organization, which can be given only by enterprises with means, as well as breadth of aim. Such enterprises, un-fortunately, have been entirely lacking up to the present time; but we see already the penetration of Japanese capital into Mongolia, though on a small scale, star-ting business in places near the Russian border.

Good Use of Poor Fodder.

Mongolian cattle-breeding merits attention not only because of its extensiveness but also because of the quality of the meat The fact is that the special physical conditions of the Mongolian steppe have created also special qualities in the local cattle; it is not particular in the mat-ter of food and is able to make use of what seems to be the poorest sort of

fodder.

From the ordinary point of view, even the possibility of cattle-breeding in Mongolia seems almost paradoxical. There are very few steppes of the type familiar to Siberia, for the most part the steppes of Mongolia are raised plains or plateaux merging into mountain chains, almost entirely waterless and with very scant vegetation

tation.

The soil consists mainly of stone and sand and only here and there can some tufts of grass be seen. A considerable part of the territory of Mongolia is occupied by the Gobi or Shamo, which, although not a "desert" as we are taught by the authors of text books on geography still can boast of but a slight covering of grass.

still can boast of but a slight covering of grass.

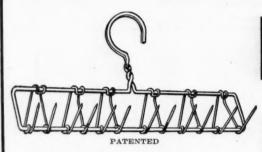
Cattle of more or less cultured stock could hardly find conditions here fit for existence, but the Mongolian herds not only exist, but even succeed during the summer period in laying up a store of fat which enables them to exist during the long winter and spring periods with their hardships and periods of famine. This reserve of fat is stored up in the fat tail of sheep, in the hump of camels and in the subcutaneous cellular tissue of cattle and horses.

Grasses High in Food Value.

Grasses High in Food Value.

A thing to be noted is the high food

Flexible "No-Germ" Bacon Hangers



Buy No Germ products from your jobber or direct from us.

Broken Teeth Shrinkage Black Streak Bending Loss Rusting Waste

and NO GERM

Made from high-grade tinned steel wire. In two sizes—8-in. and 11-in.

Flexible hangers cost no more than the "other kind" and last longer.

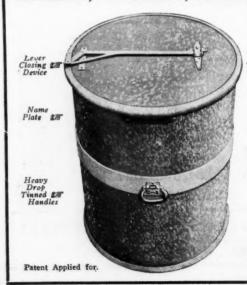
Write for samples and prices.

American Wire Form Co., Jersey City, N. J.

Makers of No-Germ Baskets-Loin Trees-Skewers-Tag Hooks Trolleys, Etc.

What you've been waiting for!

Refillable, Returnable, Galvanized Steel Container



Can roll without injury. Lard won't Expanding

and

Contracting

Band leak out.

Two sizes 30 and 50 gal.

\$6.50 and \$8.25

F. O. B. Dubuque

Will ship on request subject to inspection and prepay freight.

> Dubuque Steel Products Company

Write for Circular.

Dubuque, Ia.

Angle Iron

24.

rd-

the los onagpe. it

50,los ind the

an

ne

101

28

to

etc.

of pts

on

lia.

ced

un-

up nto

ian

eness eat

at-

of

ven

onere liar

aux

en-

ge-

and

ble

al-

ght hy

ock

not

the of

the neir

tail

ttle

bog

value of Mongolian grasses, particularly of that poor vegetation which covers alike the high waterless steppes and the slopes the high waterless steppes and the slopes and ridges of the mountains. It appears that these wretched looking and scanty grasses contain especially valuable nutritious qualities, inasmuch as the cattle decidedly prefer them to the more lush vegetation of the river valleys. The most valuable fodder is the famous "ostrets." The vegetation of the Mongolian steppes, however poor it may look, is feeding several million head of different kinds of animals. animals.

eral million head of different kinds of animals.

Neither is Mongolia particularly rich in water sources, but these physical peculiarities of the Mongolian steppes have brought about corresponding characteristics in the animals; the cattle are extremely well adapted to enduring lasting thirst; camels for example, on the long way from Kalgan to Urga (about 750 miles) remain for 5 or 6 days at a time entirely without water, and also, for that mater, without food.

Mongolian cattle during the summer and autumn are in pasture and during the winter and spring, until the appearance of new vegetation, are compelled to subsist on the scanty dried grass, which they must get from under the snow. It frequently happens that even this scanty food becomes unattainable, under a crust

food becomes unattainable, under a crust of ice, which causes starvation and perish-ing of whole herds. But this circumstance does not stop the astonishing increase of

Good Beef Produced.

Good Beef Produced.

The value of Mongolian beef, in the main, is even higher than that of the famous "Cherkess" meat. In the latter's case the accumulations of fat are exterior or immediately subcutaneous or cover the interior organs. The best meat is that in which the meat, throughout its mass, is streaked with thin layers of fat. Such sorts of meat are produced for the demands of the Western-European consumers and are obtained from special stocks of culture cattle.

The meat of the Mongolian cattle approaches the latter type in quality, that is to say, it is like the meat of culture meat stocks and this is explained by the fact that the Mongolian cattle, with few exceptions, is never used for exhausting work, but is raised and fed on the steppes. By slaughtering it when it is 4 to 6 years old in its prime, a meat of such good quality is yielded that it will satisfy the tastes of European consumers.

The contemporary conditions of the utilization of Mongolian cattle, exhausting driving or transportation, the starvatron in the quarantine stations during the time of vaccination, the slaughtering of insufficiently nourished, and sometimes quite exhausted cattle and the spoiling of the meat by severe freezing and thawing impair, of course, or destroy altogether the natural value of the product. It follows as a matter of course, that for the regulation of the utilization of the Mongolian cattle and for the development of the meat export, big capital and an intelligent spirit of enterprise are needed. This means the erection of slaughter houses at appropriate points and refrigerators, the transport of meat in refrigerators.

HAM AND BACON TRUCK



HIS is our No. 114 Ham and Bacon Truck. It is built for strength with light weight. Much lighter than the ordinary truck of this type, yet is perfectly balanced and will carry a load of 1000 pounds.

WRITE FOR OUR No. 30 CATALOGUE

STERLING WHEELBARROW CO. MILWAUKEE, WISCONSIN

duce a vivifying effect not only upon the meat business but also upon other products of Siberia, and more particularly on Mongolian cattle-breeding. At present, a big part of these products, such as hides, wool and hair, go abroad for a trifle, or are even entirely spoiled on the spot.

are even entirely spoiled on the spot.
Meanwhile by regulating the production
in conformity with the actual number of
animals, by the utilization of the above
named products, by means of a well organized export trade, or still better by the
starting of industries on the spot for finishing these raw products, the local population as well as those industries would
be enriched.

Poor Handling Cuts Value.

Poor Handling Cuts Value.

The neglect of the most elementary requirements of the trade, such as sorting the goods and putting them into a more or less proper shape, is lowering their value to an extreme degree, quite apart from the fact that the sale of produce in the raw state is less profitable. On such raw produce only the numerous middlemen and foreign manufacturers are growing rich.

As an example, we may point to the goat hides in Mongolia. They have been sold chiefly to America at a price hardly exceeding 15 copecks a piece. This cost is repaid by the value of the hair alone so that the skin is had for nothing and when it is finished into an expensive article it gives the manufacturer an enormous return.

mous return.

ing impair, of course, or destroy altogether the natural value of the product. It follows as a matter of course, that for the regulation of the utilization of the Mongolian cattle and for the development of the meat export, big capital and an intelligent spirit of enterprise are needed. This means the erection of slaughter houses at appropriate points and refrigerators, the transport of meat in refrigerators, the transport of meat in refrigerators in the place of the obsolete method of conveying live cattle over thousands of miles.

By-Products Wasted.

At the same time, with the wide organization of slaughter houses, Siberia would be enriched by the utilization of the products of slaughtering—offal, hair. hoofs, horn, albumen and so on. There would also be a development of pig-breeding based on the fattening of pigs with the contents of the stomachs, together with the meat refuse.

This would furnish quite a healthy enterprise on a large scale which would pro-



Vats and Tanks

FOR USE IN MEAT PACKING AND ALLIED INDUSTRIES

We are in position to furnish all sizes Tanks and Vats for cooking, curing, soaking, chilling, and va-rious other uses. Furnished in either Cypress or Fir.

Prompt delivery assured.

KALAMAZOO TANK & SILO CO.

Kalamazoo, Michigan

Tank Builders Since 1867

Myles Pure Salt

A large number of the meat packers have found best results using our 99-84/100% PURE SALT in dry salting, pickle, hides and capping on account of no moisture-clean and white.

A trial car will convince you.

HIGBIE SALT CO.

Fred K. Higbie, Pres.

360 N. Michigan Ave., Chicago, Ill.

expenditures on organization. But, I re-peat, the work must be undertaken by peat, the work must be undertaken by experts who have previously studied this business on the spot, and together with the export of all products they must simultaneously organize on a large scale the import of all the goods of which the nomadic Mongol is in need.

Chicago Section

Joseph A. Garrick, of Tupman, Thurlow & Co., New York City, visited his Chicago friends during the week.

Harold A. Ellis, of the Vegetable Oil Products Co., Los Angeles, Calif., spent a few days in the city this week.

J. S. McLean, secretary and treasurer of the Harris Abattoir Company, Ltd., Toronto, Canada, was a Chicago visitor during the week.

Packers' purchases of livestock at Chicago for the first three days of this week totalled 24,559 cattle, 7,662 calves 91,399 hogs and 26,433 sheep.

E. C. Merritt, vice-president and general manager of the Indianapolis Abattoir Co., Indianapolis, Ind., was in Chicago late in the week.

John W. Parker, of the Chicago office of the Portland Vegetable Oil Mills Company, returned to the city this week after a vacation trip to the Pacific coast.

Clarence L. Coleman, secretary of S. Oppenheimer & Co., Chicago, has succeeded to the management of the Chicago office of the company, which position was made vacant by the recent death of Louis Oppenheimer.

Swift & Company's sales of carcass beef in Chicago, for the week ending Saturday, June 28, for shipment sold out, ranged from 7.00 cents to 18.00 cents per pound, averaged 13.13 cents per pound.

Provision shipments from Chicago for

C. W. RILEY, Jr.

2109 Union Central Bldg., Cincinnati, O. Provisions, Oils, Greases and Tallows
Offerings Solicited

H. C. GARDNER F. A. LINDBERG
GARDNER & LINDBERG

ENGINEERS

ENGINEERS

Mechanical, Electrical, Architectural
SPECIALTIES, Packing Plants, Cold, Storage,
Manufacturing Plants, Power Installations, Investigations
1134 Marquette Bidg.

CHICAGO

M. P. BURT & COMPANY

Engineers & Architects
Packinghouse and Cold Storage Designing—
Consultation on Power and Operating Costs,
Curing etc. You Profit by Our 25 Years' Experience. Lower Construction Cost, Higher
efficiency.
206-7 Falls Bldg., MEMPHIS, TENN.

the week ending June 28, 1924, with comparisons, were as follows:

 Last week.
 Prev. week.
 Last year.

 Cured meats, lbs.
 21,630,000
 19,290,000
 15,381,000

 Fresh meats, lbs.
 40,937,000
 41,208,000
 19,687,000

 Lard, lbs.
 8,754,000
 9,233,000
 9,773,000

Meat Trade Movies-No. 50.



HE SELLS 'EM AT ANY DISTANCE.

Chas. H. Ungerman, president of the Birmingham Packing Co., Birmingham, Ala., doesn't need radio to keep in touch with his trade. Keeping a New York branch house booming is nothing for this Alabama packer. It's all in knowing how to do it!

Mike Lilienthal celebrated this week the passing of the first year of his being in business for himself. Mike, doing business under the name of The Lilienthal Company, started out in the brokerage business July 1 a year ago, and has been very successful.

What are proper hog cooling temperatures? Ask THE BLUE BOOK, the "Packer's Encyclopedia."

H. P. Henschien R. J. McLaren
HENSCHIEN & McLAREN

Architects
1637 Prairie Ave. Chicago, Ill.
PACKING PLANTS AND COLD STORAGE
CONSTRUCTION

Fred J. Anders

Chas. H. Reimers

ANDERS & REIMERS

ENGINEERS

814 Erie Bldg. Cleveland, O.

Packing House Specialists

SWIFT'S PLANT ASSEMBLY.

Members of the Seventh Assembly of Swift & Company's Chicago plant met for organization purposes on June 10. Elections had been held in fifteen divisions of the plant and five new representatives were on hand.

The report of the Committee on Committees was presented, recommending two new committees, one on rules, procedure and elections and the other on interpretation and adjustment of plant rulings. These committees were organized.

Officers for the coming six months are: Chairman, Dr. W. D. Richardson; secretary, A. T. Kearney, assistant secretary, M. W. Finlayson.

CHICAGO PROVISION STOCKS.

Stocks of provisions in Chicago at the close of business on June 30, 1924, with comparisons, are reported by the Chicago Board of Trade as follows:

June 30, '24. May 31, 24. June 30, 23. 452 482 43,457 42,554 29,401 58,064,053 13,191,279 48,370,619 14,231,348 2,280,207 4.816.923 D. S. cia...
made since ...
1, 1923
D. S. rib bellies,
made since Oct. 1, 1923
Extra short clear
middles, m a de
since Oct. 1, '23,
mid-29,616,890 25,985,391 31,641,141 6.640.946 6.632.393 721,140 288,850 141,868 4,111,468 101 264 36,097,426 26,259,840 18,603,390 19,123,916 14,392,604 11,381,532 215.380 154,142 5,788,913 11,679,143

H. N. Jones Construction Co.

San Antonio, Texas
Designs and Builds
Packing Houses
30 Years Experience

George F. Pine Walter L. Munneoke
Pine & Munnecke Co.
PACKING HOUSE & COLD STORAGE
CONSTRUCTION; CORK INSULATION &
OVER HEAD TRACK WORK.

10 Merquette Deirolt, Mich. Cherry 3750-3751
Bids.

PACKERS ARCHITECTURAL & ENGINEERING CO.

WILLIAM H. KNEHANS, Chief Engineer

ABATTOIR PACKING AND COLD STORAGE PLANTS

Manhattan Building, Chicago, III.

Cable Address, Pacarco

LEON DASHEW

Counselor At Law 15 Park Row New York

DEATH OF LOUIS OPPENHEIMER.

In the death of Louis Oppenheimer, which occurred in Chicago last week at his residence, 1015 Hyde Park Boulevard, the casing industry lost one of its best known and best informed men. He was ill but a short time.

Mr. Oppenheimer's acquaintance was as wide in foreign countries where the casing business has reached international proportions as it was in this country. Of his 45 years in the business, 22 were spent in England as head of the London office of S. Oppenheimer & Co. He came to Chicago in 1916, on the death of Gustav Freund to take over the management of the Chicago end of the business. At the time of his death he was vice president and treasurer of the company.

Having spent a lifetime in the trade, Mr. Oppenheimer was familiar with every phase of it. He was a thorough business man and his keen vision and sound judgment aided in bringing the casing business to its present high standard.

Mr. Oppenheimer was 59 years of age at the time of his death. He leaves a widow and one daughter, Mrs. Robert Altman. Funeral was held on Thursday, June 26, and interment made in Rose Hill Cemetery.

LEWIS MADE LIEUT. COLONEL.

Dr. W. Lee Lewis, director of the Bureau of Scientific Research of the Institute of American Meat Packers, has just been advanced to the rank of Lieut. Colonel in the U. S. Reserve Corps, Chemical Warfare Service. Dr. Lewis is the inventor of "Lewisite," a deadly gas designed for use in warfare.

In connection with the Institute's fellowship at the Mellon Institute of Industrial Research, Dr. Lewis recently visited the plant of the American Protein Corporation, Buffalo, New York. This company is engaged in studying the uses of blood in products suitable for human consump-

8

84 86 10

12

13

11

THE PRICE CURRENT ANNUAL.

The 75th annual Price Current Year Book is just off the press. It contains 112 pages of statistics on provisions and lard, livestock, grain, exports, imports, etc.

The provisions, lard and livestock statistics cover the many angles of these markets over a long period of years, and furnish valuable data for packers and the meat trade generally.

The book as a whole is a valuable, authoritative trade compilation, and can be purchased direct from the publishers, The Price Current-Grain Reporter, 309 S. La Salle St., Chicago, Ill.

MISS CARLSON IN EAST.

Miss Gudrun Carlson, director of the Bureau of Home Economics, of the Institute of American Meat Packers has been in New York State, attending the Home Economics Extension Conference at Cornell University, Ithaca, N. Y., and the seventeenth annual meeting of the American Home Economics Association, at Buffalo, as well as engaging in other work in behalf of the industry. Miss Carlson is secretary of the Home Economics in Business Section of the latter association. She will be back in Chicago this week.

Tax or Accounting Advice

Free advice on tax or accounting matters in connection with the new or old revenue law may be obtained by subscribers to The NATIONAL PROVISIONER upon application. Send your inquiries either to The NATIONAL PROVISIONER, Old Colony Building, Chicago, or to Archibald Harris & Company, Marquette Building, Chicago. In the latter case, mention that you are a subscriber to The NATIONAL PROVISIONER.

CHICAGO LIVESTOCK.

RECEIP	TS.		
Mon. June 23 23, 782 Tues, June 24 6,963 Wed. June 25 6,242 Thur. June 26 5,562 Fri. June 27 3,302 Sat. June 28 239	Calves. 3,282 3,585 1,571 3,460 744 72	Hogs. 75,978 34,165 23,411 30,437 29,972 5,238	Sheep. 14,906 15,237 8,974 13,875 6,525 2,750
Totals last week46,080 Previous week54,291 Year ago54,432 Two years ago57,185	12,714 15,960 14,087 13,552	199,201 172,773 215,413 177,493	62,267 70,358 41,133 60,388
SHIPME			
Mon., June 23 4,796 Tues., June 24 2,923 Wed., June 25 3,745 Thur., June 26 2,676 Fri., June 27 2,037 Sat., June 28 552	25 42 4 3 1	9,653 6,220 4,434 4,003 9,639 3,018	1,176 2,355 2,712 2,691 2,273 1,022
Totals last week16,759 Previous week17,861 Year ago16,841 Two years ago17,037	75 240 205 487	36,967 31,254 39,995 37,614	12,229 12,809 3,301 4,720

Comi	d	n	e	đ	1	×	rp.	e	k	ŀ	v		ŀ	10	12		P	Pd	C.F	ai	T	ıtı	R		ıt	ele	ven	markets
Sheep												*										.1		75	5,	271		1,752,897
Hogs	۰										۰							0 0				. 5		34	0,	950		5,098,021
Calves																										,709		423,424
Cattle																						.1		15	1	624		1,463,640
																										4.		1923.

for 1024 to suite 20, with comparisons	•
Week.	Year to date.
Week ending June 28705,000	20,235,000
Previous week	
Corresponding week 1923	19,353,000
Corresponding week 1922634,000	14,741,000
Corresponding week 1921569,000	15,684,000
Combined receipts at seven points ending June 28, with comparisons:	for the week

Corresponding week 1922. Corresponding week 1921.			14,741,000 15,684,000
Combined receipts at ending June 28, with co			the week
	*Cattle.	Hogs.	Sheep.
Week ending June 28	145.000	605,000	160,000
Previous week		615,000	192,000
1923		642,000	140,000
1922	.178.000	642,000	166,000
1921	132,000	455,000	

Con	nbin	ed re	eceipt	s at	seven	m	arkets	for	1924	to
June		and	the	corre	spondin	g	period	for	previ	eno

Jour														*Cattle.	Hogs.	Sheep.
1924								,						.4,664,000	16,759,000	4,552,000
1923			۰	۰		9					۰			.4,662,000	16,073,000	4,805,000
1922		۰				۰	0	۰		۰		٠		.4,368,000	12,080,000	4,470,000
1921			0	9	9			0	٠				٠	.4,007,000	12,319,000	5,820,000

*Calves at Omaha. St. Louis and St. Joseph are counted as cattle.

Chicago Stock Yards receipts, average weight and top and average prices for hogs for under-mentioned weeks:

																				1	Number :	weight	Pri	ces
																				1	received.	lbs.	Top. A	verage
*We	el	t	1	91	n	d	î	n	g		:	ĥ	1	n	e		2	18	Ì.	Ĵ	.200,000	239	\$ 7.30	\$ 6.90
Prev	io	m	8			V	v	e	e	k											.172,773	237	7.55	7.15
1923																					.215,413	237	7.50	6.85
1922																					.177,493	241	11.00	10.25
1921																					.160,682	235	9.40	8.65
1920						٠				٠		٠				٠					.158,857	239	†16.60	15.20
1919																				é	.135,864	238	22,25	21.30
1918																					.136,002	238	17.15	16.75
1917					٠	4															.102,393	230	16.05	15.30
1916																					.120,414	233	10.25	9.95
1915																					.108,597	238	7.95	7.45
1914				۰		۰									9						. 93,997	240	8.90	8.60
Aver	a	gv	В		1	9	ı	4		1	9	2	3								.141,000	237	\$12.70	\$12.05

* Receipts and average weight for week ending June 28, 1924, unofficial.

WEEKLY AVERAGE PRICE OF LIVESTOCK.

																		attle.	Hogs.	81	eep.	Lambs.
Week	1	e	n	đ	i	n	g		,	ī	a	n	e	2	Ħ	3	. 5	8.75	\$ 6.90	- 8	5.00	\$13.60
Previo	u	8		,	W	76	×	9]	k									9.40	7.15		4.90	14.90
1923														 				9.85	6.85		6.15	15.10
1922	i	i												 				9.20	10.25		6.00	12.80
1921																		7.60	8.65		4,20	10.15
1920																		14.95	15.20		8.05	14.15
1919																		13.85	21.30		8.80	16.80
1918																		15.80	16.75		12.00	18.60
1917	ĺ.																	12.20	15.30		9.00	16.25
1916																		9.50	9.95		7.20	10.70
1915			i															9.45	7.45		6.00	9.50
1914																		8.95	8.60		5.40	9.00
Avera	24	e		1	9	1	4		u):	25	3		 			. :	811.15	\$12,00	8	7.30	\$13.30

Following is given the net supply of cattle, hogs and sheep for packers at the Chicago Stock Yards for week mentioned:

		Cattle.	Hogs.	Sheep.
*Week	June 2	830,000	163,100	50,800
Previous		36,430	141,519	56,549
1923	 	37,779	175,508	37,832
1922	 	40,148	139,879	55,668
1921	 	24,094	133,914	57,763

*Saturday, June 28, estimated. Chicago packers hogs slaughtered for the week ending June 28, 1924.

enuing suite 20, 1021.	
Armour & Co	14,9
Anglo-American	7,3
Swift & Co	20,1
Hammond Co	11,4
Morris & Co	18.0
Wilson & Co	
Boyd-Lunham	
Western Packing Co	15.6
Roberts & Oake	7.7
Miller & Hart	
Independent Packing Co	
Brennan Packing Co	77
Wm. Davies Co	
Agar Packing Co	
Others	
Totals	
Previous week	140 1
Frevious week	100 1
Year ago	
Two years ago	
Three years ago	
(For Chicago livestock se	no name 28)

FOSTER BOS.

No. 8C Boning Knife

Butchers cannot afford to use knives that do not cut easily and hold a keen edge. Time wasted in constant sharpening means lost profits.

Foster Bros. Knives

are so extensively used because they successfully meet the requirements of exacting butchers. Each blade is made of special quality cutlery steel, that takes and holds a keen cutting edge. These blades are forged into special shapes, for every requirement, butcher knives, boning knives, sticking knives, skinning knives—all perfectly balanced to perform their work with least effort on the part of the butcher.

You can use Foster Bros. Knives to advantage

Buy from your supply house

THE BRAND IS FOSTER BROS.

ZNOZ 3 NOJJITAH) NHOL

Established 1835

Manufacturers of Scales and Butchers' Supplies

85-99 Cliff Street

New York City, N. Y.

Chicago Provision Markets

Reported by THE NATIONAL PROVISIONER DAILY MARKET SERVICE

CASH PRICES.		FUTUR	E PRI	CES.	
Based on Actual Carlot Trading, Wednesd July 2, 1924.	lay,	Official Board of SATURDAY			ices.
Green Meats.		LARD-Open.	High.	Low.	Close.
Regular Hams— 8-10 lbs. avg. 10-12 lbs. avg. 12-14 lbs. avg.	@14 % @14 %	July 10.87½ September11.15 October 11.27½ CLEAR BELLIES—	10.87½ 11.15 11.27½	10.82 ½ 11.10 11.22 ½	10.85 11.15 11.25
14-16 lbs. avg	@14 % @14 % @14 % @14 % @14 % @15	July	10.171/2 10.571/3	10.15 10.521/2	10.15 10.55
Skinned Hams-		July 9.82½ Sqptember 9.95	9.821/9 9.95	9.771/2	9.7714
14-16 lbs. avg	@1717				9.95
20-22 lbs. avg	@16% @17% @16% @15% @14% @13% @12%	LARD— MONDAY,	High.	Low.	Close.
Picnics-		July	$10.90-92$ $11.20-22$ $11.32\frac{1}{3}$	10.87 1/4 11.17 1/2 11.30	10.87-90 11.17 b 11.30ax
4- 6 lbs. avg	@ 8% @ 8% @ 7%	July10.15 September10.55 October	10,15 10.571/2	10.00 10.45	10.00-02 10.45
G- 8 lbs. avg	@13%	SHORT RIBS-	0.771/	9.70	10.55 n
10-12 lbs. avg	@13 @124 @114 @114	July 9.72½ September 9.92½	9.77½ 9.97½	9.921/2	9.75 9.97
Pickled Meats.	WIL	LARD— TUESDAY Open.	High.	1924. Low.	Close.
Regular Hams—		July10.90 September11.20 October11.32½	$10.92\frac{1}{2}$ $11.20-22$ $11.32\frac{1}{2}$	10.80 $11.07\frac{1}{2}$ 11.20	10.80 11.07½ 11.20
10-12 lbs. avg	%@15 %@15 %@15 %@15 %@16%	CLEAR BELLIES— July 10.02½ September 10.45 October	10.021/2 10.471/2	9.95	9.95 10.37 10.47 n
Bolling Hams— 16-18 lbs. avg	@161/2 @17 @17	SHORT RIBS 9.75 September 9.97½ October 9.97½	9.75 9.971/ ₉	9.7214 9.921/2	9.72 9.92 10.02 n
Skinned Hams—		WEDNESD	AY, JULY	2. 1924.	
14-16 lbs, avg. 16-18 lbs, avg. 18-20 lbs, avg. 20-32 lbs, avg. 22-34 lbs, avg.	@151/4 @151/4 @151/4 @15	LARD— Open, July	High.	Low. 10.80 11.05 11.17%	Close. 10.82ax 11.05 11.17
25-30 lbs. avg	@13% @13%	CLEAR BELLIES-	11.25	11.17%	
Picnics 4 6 lbs. avg. 6 8 lbs. avg. 8 10 lbs. avg.	@ 9 14 @ 8 14 @ 7 14 @ 7 14	July September October SHORT RIBS—	*****	*****	10.05 b 10.45 b 10.55 b
10-12 lbs. avg	@ 7%	July September	* * * * *	* * * * *	9.75 b 9.95 b
6- 8 lbs. avg	@131/4	THURSDA	Y. JULY	3. 1924.	
8-10 lbs. avg	@1314 @12% @12% @12%	LARD-			Close.
14-16 lbs. avg	@11%	July	121/4 11.1	21/2 11.05	10.82 ax 11.05 11.17 ax
Dry Salt Meats.		CLEAR RELLLIES			
Extra ribs, 35-45 Extra clears, 35-45 Regular plates, 6-8 Clear plates, 4-7 Jowl butts	@ 9% @ 9% @ 8 @ 7% @ 7%	July Sept 10. Oct. SHORT RIBS—			10.12 b 10.50 ax 10.60 n
Fat Backs-		July 9. Sept 10.	82½ 9.8 00 10.0	7% 9.82° 7% 10.00	9.85 ax 10.00 ax
8-10 lbs. avg. 10-12 lbs. avg. 12-14 lbs. avg. 14-16 lbs. avg. 16-18 lbs. avg. 18-20 lbs. avg.	@ 7% @ 8% @ 8% @ 9% @10 @10%	FRIDAY	JULY or ma	4, 1924.	
20-25 lbs. avg	621076	Why should s	neste ir	CUTA	he over-

Why should meats in cure be over-hauled, and when should it be done? Ask THE BLUE BOOK, the "Packer's Encyclopedia."



14-16 lbs. avg... 18-20 lbs. avg... 20-25 lbs. avg... 30-35 lbs. avg... 35-40 lbs. avg...

The Gruendler Crushers and Pulverizers
REDUCE COSTS AND FLOOR SPACE
The Gruendler Double Boll Crusher Ideal for Salt Cake,
and Raw Bone for manufacturing of Glue products, also
for fertilizer materials and other By-products. They
actually reduce cost, require less floor space and cost
little or nothing for repairs, due to correct design and
powerful construction.
Installed on positive quarantoe.
Why not investign the Gruendler equipment. It will
answer have stigning and grinding problem.
Manufacturing of Swing Hammer Carcasses, Boef Heads,
Shin Sone, Beef Scrap, Tankage, Fertilizer Grinders to
any Menness desired.
WRITE FOE INFORMATION
PATENT CRUSHER & PULV. CO.

GRUENDLER PATENT CRUSHER & PULV. CO. 932 N. Main St. Established 1885 St. Louis, Mo.

CHICAGO HOG PURCHASES.

Purchases of hogs by Chicago packers for the week ending Thursday, July 2, 1924, with comparisons, follows:

	Week, ending July 2.	Prev. week.	Cor. week, 1923.
Armour & Co	12,506	13,723	12,761
Anglo-Amer, Pro. Co	4.820	7.364	6,214
Swift & Co	14.191	18,105	19.818
G. H. Hammond Co	8,483	11,278	6.810
Morris & Co	15,660	17,828	13,069
Wilson & Co	14,945	16.026	15,732
Boyd-Lunham & Co	8,138	10,653	6,467
Western Pkg. & Pro. Co.	9,900	10,800	9,900
Roberts & Oake	5,725	6,904	3,015
Miller & Hart	6.478	8,085	2,071
Independent Packing Co	7.187	8,411	5,099
Brennan Packing Co	4.536	7.050	5,710
	-9		800
William Davies Co	400	675	1,700
Agar Packing Co			
Others	3,000	2,500	
Total	115,969	139,402	189,100

CHICAGO RETAIL FRESH

MEATS	
Beef.	
No. 1. No. 2.	No. 3. 15 20 16 20 25 25 18 124 18 10 18
Lamb.	Com.
Hindquarters 38 Legs 40 Stews 12½ Chops, Shoulder 24 Chops, rib and loin 50	25 28 13 20
Mutton.	
Legs 26 Stew 12½ Shoulders 20 Chops, rib and loin 35	*
Pork.	
Loins, whole, 8@10 avg. 20 Loins, whole, 10@12 avg. 118 Loins, whole, 12@14 avg. 119 Loins, whole, 14 and over 14 Chops 25 Shoulders 15 Lutts 15 Hocks 16 Leaf lard, unrendered 15 Loins, whole, 14 Loins, whole, 14 Loins, whole, 15 Loins, whole, 16 Lo	@23 @25 @16 @18 @30 @14 @18 @12 @12
Veal.	
Hindquarters	685 618 645 618 622 666 640
Butchers' Offal.	
Suet Shop fat Bones, per 100 lbs. Calf skins Kips Deacons	@ 4 @ 2 \$50 @15 @13 @12
CURING MATERIALS.	

CURING MATERIALS.	
Bbls.	Backs.
Double refined saltpetre, gran., L. C. L 61/2 Crystals	6% 7%
Double refined nitrate of soda, f. o. b. N. Y. & B. F., carloads	4% 5%
Boric acid, in carloads, powdered, in bbls	9%
In bbls. in less than 5-ton lots101/2	10
Borax, carloads, powdered, in bbls 5 In ton lots, gran, or powdered, in bbls. 5%	4%
Salt— Granulated, car lots, per ton f. o. b., Chicago, bulk Medium, car lots, per ton, f. o. b., Chicago, bulk	\$ 8.80
bulk Rock, car lots, per ton, f. o. b., Chicago.	7.60
Sugar— Raw sugar, 96 basis Second sugar, 90 basis Syrup, testing 63 to 65 combined sucrose	@5.50 @5.35
and invert Standard, granulated, f. o. b. refinery	@32
(net)	@7.00
Plantation, granulated, f. o. b., New Or- leans (less 8 per cent)	@6.80
White clarified, f. o. b. New Orleans (net) Yellow clarified, f. o. b., New Orleans (net)	@6.25

3.80 3.80 7.80

5.50 5.35 32 7.00 6.80 6.25

CHICAGO MARKET PRICES Solid—30-60 lb., tube, fo.b., Ohloago......

CHICAGO	MAIN	RKE I PRICES	Solid—30-60 lb. tubs, f.o.b. Chicago. 231 Cartons, rolls or prints, 1-lb. 622 Cartons, rolls or prints, 265 lbs. 621% Shortenings, 30@60 lbs. tubs. 615
WHOLESALE FRESH ME	ATS.	DOMESTIC SAUSAGE.	Cartons, rolls or prints, 2@5 lbs
Carcass Beef. Week ending July 5. Good native steers 18 @16 Good native steers 16 @15 Medium steers 13 @15 Holicers, good 13 @18 Characters, choice 225 Fore quarters, choice @12 Beef Cuts.	Cor. week 1923. 17 @18 15 @16½ 13½@15 13 @16 8 @12 @24 @13	Fancy pork sausage, in 1-lb, carton. @23 Country style sausage, fresh, in link. @15 Country style sausage, fresh, in bulk. @14 Country style sausage, smoked. @17 Mixed sausage, fresh. @131/4 Mixed sausage, fresh. @131/4 Frankfurts in pork casings. @14 Frankfurts in pork casings. @17 Bologna in beef bungs, choice. @151/4 Bologna in leef middles, choice. @151/4 Bologna in clotth, paraffined, choice. @141/4 Liver sausage in hog bungs	DRY SALT MEATS. Extra short clears
Steer Loins, No. 1.	@27 16 @27 25 @34 15 @22 @25 @25 @24 @18 @19 @19 @19	Blood sausage #15½ Polish sausage #215 Souse #16 DRY SAUSAGE. Cervelat, choice, in hog bungs #215½ Cervelat, new condition, in hog bungs #215½ Cervelat, new condition, in beef middles #215½ Thuringer Cervelat #220½	WHOLESALE SMOKED MEATS. Regular hams, fancy, 14@16 lbs
Steer Pintes	61/2	Mortadella, new condition G00 Capacola G46 G46 Italian style hams G35 G35 Virginia style hams G35 G36 G36	off, smoked 934/2 91/2 9
Flank Steeks	7 (8 5 5 8 8 4 4 6 7 7 8 8 8 4 4 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Frankruft style sausage in pork casings— Small tins, 2 to crate	Acidless tailow oil 10
Fresh Tripe, H. C.	6 6 8 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6 % 6	Beef bungs, No. 1, 400 pieces, per tierce, per piece	HORNS, HOOFS AND BONES. No. 1 horns, 75 lb. average
Veal Product.	8 @ 9 52 @58 30 @32 @33 @31 @35 @36 @36 @28	D. f. o. s @2.00	Note—These quotations apply to No. 1 product, which must be assorted, free from grease spots and cracks, hard and clean, uniform as to est and weight. Packed in double bags and carload lots. Quotations on unselected stock will be found in "Packinghouse By-Products Markets" reports on another page. LARD (Unrefined).
Lamb Kidneys, per lb @25	@25 @32 @13 @125 @ 8 @15 @12 @20 @6 @12	Regular tripe, 200-lb. bbl. 14.00	Prime, steam, cash tierces \$\begin{align*}{ccc} 20.80 & 9.90 & 9.90 & 9.87 & 9.77 & 9.77 & 9.77 & 9.77 & 9.77
Mutton Loins	@22 @18 @ 6 @13 @10	Sticed dried beef. 1.85 4.00 17.50 56.00	Oleo oll, extra 12½@12% Oleo stock 10 @10½ Prime No. 1, oleo oll 10½,011 Prime No. 2, oleo oll 10 @10½ No. 3 oleo oll 10 @10¼ No. 10 eleo stearine, edible 11 @11½ No. 2 oleo stearine, edible 2 9½ TALLOWS AND GREASES.
Lenf Lard Color Color	64-614-61-61-61-61-61-61-61-61-61-61-61-61-61-	Chill con carne with, or without, beans 1.25	Edible tallow, under 2% acid, #5 titre. 94,@ 9% Francy tallow, under 2% acid, 48 titre. 7%@ 8 No. 1 tallow, basis 10% f.f.a., 42@45 6%@ 7 No. 2 tallow, basis 40% f.f.a., 40 titre. 6 @ 64, @ 7 Prime oleo stearine 12 @11½ Choice white grease, max, 4% acid, loose Chicago B. White grease, max, 5% acid 7 %@ 8 B-White grease, 12.15 f.f.a. 6%@ 64, Yellow grease, 15-20 f.f.a. 6%@ 64, Yellow grea

How to Run a Retail Market

Ouestion of Sales and Cost of Merchandise Sold is Important the Successful Butcher

In last week's issue of THE NATIONAL Provisioner was printed the first installment of the final report of Dr. Horace Secrist of Northwestern University on his study of retail meat market costs and expenses. It summarized the work briefly and told what the study brought out.

The second installment is given here-

with, and tells where and how the reports were received, and takes up the subject of sales and cost of merchandise soid.

This report-invaluable to every retailer who wants to be a better business man-may be had at once in complete book form for \$1.00, upon application to THE NATIONAL PROVISIONER. Particulars are given elsewhere on this page.

Expenses, Profits and Losses in Retail Meat Stores

By Horace Secrist

(Copyright, 1924, Institute of American Meat Packers and Northwestern University,)

[EDITOR'S NOTE—This is the second installment of "Expenses, Profits and Losses in Retail Meat Stores," by Horace Secrist, Director of the Bureau of Business Research of Northwestern University. It presents and analyzes the results of a study of costs, expenses, profits or losses in retailing meats, undertaken by the Bureau of Business Research and the Bureau of Agricultural Economics of the United States Department of Agriculture in co-operation.

The study was undertaken in consequence of representations made by the National Association of Meat Councils to the two agencies mentioned. In these representations the need for such a study was pointed out.]

Introduction

SOURCE OF ACCOUNTING DATA USED IN THIS REPORT.

One hundred and forty-three retail meat dealers in Chicago, Cleveland and New York furnished the profit and loss statements upon which this report is based. Reports were received at intervals of four weeks (calendar months in New York) for the following periods:

Chicago, from February, 1923, to March, 1924

Cleveland, from April, 1923, to March, 1924

New York, from April, 1923, to Februату, 1924.

For the three cities, the 143 stores supplied 1,088 separate statements.

How the Reports Were Secured.

The profit and loss statement of dealers in Chicago and Cleveland were secured by representatives of the Bureau of Business Research, Northwestern University. Those coming from New York were obtained by a representative of the U. S. Department of Agriculture, Bureau of Agricultural Economics. In all of the cities, the field men of the respective bodies gave their time for the periods covered:

- 1. To, installing in the shops a uniform system of bookkeeping records prepared by the Bureau of Business Research.
- 2. To supervising the bookkeeping of the merchants in whose shops the records were installed.
- 3. To securing and editing the profit and loss statements which are used in this
- 4. To instructing the merchants in methods of merchandising and in utilizing in their management the results of the

analyses currently made of the reports supplied.

5. In the few cases where our records were not installed, to adjusting the merchants' records to the standard forms adopted by the bureau.

Are the Records Comparable?

The records of the various merchants are as nearly comparable as they can be made. Editorial adjustments alone made through correspondence on the basis of a questionnaire would have resulted in securing wholly unsatisfactory records, because

> only the larger retail meat shops have satisfactory accounting records; and those which they have are generally not uniform.

Accordingly, the more costly, but absolutely necessary plan of first, preparing

Running a Meat Store

Complete copies of this report on "Expenses, Profits and Losses in Retail Meat Stores" may be obtained by any retailer desiring

All the facts and figures-including the approved form for drawing up a "Profit and Loss drawing up a Statement"-are combined in a 70page book.

This is the first time such reliable and practical information on retail accounting has ever been made available to the retailer.

Fill out and return the following order, with remittance for \$1.00; and the book will be sent postpaid:

The National Provisioner: Old Colony Bldg., Chicago, Ill. Please send me copy of "Expenses, Profits and Losses in Retail Meat Stores," by Horace Secrist.

Price														
City														
Street.														
Name.			۰	۰										

bookkeeping records suitable for use in retail shops of different size, uniform as to outline, and differing only as to detail, and second, of installing these records and personally and individually supervising their use was adopted. By these means, comparable records were secured.

Types of Shops from Which Data Were Received

The shops in the three cities from which reports were received are those who are willing to co-operate. No selective basis of choice was adopted. Appeal was made to the merchants through the respective Master Butchers' Associations, and those who showed a willingness to co-operate were served in the order in which they expressed their interest

On the whole, the smaller the shop, the greater the amount of time which was given to installing the records, supervising their use, and correcting, editing and analyzing the reports submitted.

In each city, every merchant received some assistance. In all cases, the field men came into intimate contact with the merchant in the shop. In some cases, this contact was almost continuous; in others, only occasional as necessity demanded.

Sales

THE SALES OF RETAIL MEAT STORES

The Size of the Stores Studied .- How large is the average retail meat store? So far as is known, there is no answer available to this question for the country as a whole.

There is an answer, however, for the three cities, Chicago, Cleveland and New York, based upon the reports received from merchants in these cities who furnished the information upon which this

report is based.
For these cities, the most common size For these cities, the most common size—volume of sales—is between \$26,000 and \$32,500 per year. Stores with sales from \$32,500 to \$39,000 are almost as common as are also those with sales between \$19,500 and \$26,000, and \$39,000 and \$45,500. More than one-half of all of the stores studied had annual sales between \$19,500 and \$45,500. For purposes of analyzing the condi-

For purposes of analyzing the conditions of operation, the stores have been divided into five groups. These groups are given below, their sales being distinguished for four-week as well as for yearly periods. Opposite each group the equivalent man-power is indicated. These are alent man-power is indicated. These are only rough figures, but they are indica-tive of the experience of the stores studied.

Under \$1,000 Less than \$13,000 Less than one man. \$1,000 to \$2,000 \$13,000 to \$26,000 TI \$1,000 to \$2,000 One man and extra help, \$2,000 to \$4,500 Two men and extra help, \$4,500 to \$7,500 ш

IV \$4,500 to \$7,500 to \$97,500 to \$97,500 Three men and extra help.

\$7,500 and over \$97,500 and over Four men or more and extra help.

These different sized stores are referred to in terms of their "man-power"—the stores being distinguished as less-than-one-man, one-man, two-man, etc. The effect of size of shop upon gross margin,

expenses, profits, etc. is discussed in the sections bearing on these topics.

The Effect of the Seasons Upon Retail Meat Sales.—The sales of stores are practically constant from January to June 15. A "summer slump" of about 5 per cent then sets in and lasts until the first of Seatember.

of September. From September 1 to the end of December improvement in sales is general, il,

nd

ng

ıs,

re

ch

re is le

se

te

y

1e

as

ıd d

11 ne

S.

in e-

So

ila he

iis

00

es as

he

en

li-

ps n-ly

re a-

es

000

000

500

500

r-

n-ef-

he ail

er

PRASELF CONTAINED

the peak coming in November and December, in part because of the holiday trade, and representing an increase of approximately 8 to 10 per cent over the other winter months.

This is the condition in the year studied. What it is in other years in the same cities or for the same year in other places

is not known.

Amount of Sales and Effect on Gross Margins, Operating Expenses, and Frofits.

Without repeating what is said later, it may be concluded as follows:

1. The larger the store, the higher the cost of merchandise sold in terms of sales.

2. The larger the store, the smaller the gross margin as a per cent of sales.

3. The larger the store, the smaller the coerating expenses.

operating expenses. 4. The expenses which decreases fastest, as a percentage of sales, with increasing volume is that paid for rent.

5. The larger the store, the more rapidly

5. The larger the store, the most stock is turned.

6. The larger the store, the greater the chance of making a profit, and the less the chance of suffering a loss.

Why Sales in Retail Meat Stores Are Small per Store.

The small shop is supreme in the retail

The small shop is supreme in the retail meat business primarily because:

1. The service rendered must be accessible to al! with the minimum of inconvenience. Small units of operation seem necessary. There does not, however, appear to be the same necessity for small ownership units. If ownership units were larger, management would probably be more efficient.

2. It can be entered with little specialized training, and with small amounts of capital.

capital.

3. It attracts the "small" business man—a class too numerous and entering too rapidly into this trade.

Cost of Merchandise Sold

Cost of Merchandise Sold Defined and Explained.—By the expression "cost of merchandise sold" is meant the cost price merchandise sold is meant the cost price to the merchant of the goods which he sells. This amount is made up of the inventories on hand at cost price at the beginning, less the inventories on hand at cost price at the end of a period, plus the merchandise purchased at cost price during a period

It is, therefore, the total value (at cost price) of merchandise which a merchant sells. The difference between the cost

sells. The difference between the cost and the sale price of the merchandise constitutes the gross margin. Out of this expense must be paid and profits, if there are to be any, made.

The amounts of the gross margins for merchants located in different cities, operating shops of different size, and making a profit or suffering a loss and making a loss and size and making a loss and size and siz ing a profit or suffering a loss are dis-cussed in the following section. If margins are high, cost of merchandise sold is low, and vice versa.

What Is the Cost of the Merchandise Sold as a Per Cent of Sales in Retail Meat Shops?

Typical Amounts for All Stores.—The most typical costs of merchandise sold for retail meat dealers range from 73 to 78 per cent of sales. The amounts for the middle 50 per cent of the dealers in the different cities combined varied from 71.5 to 80.5, the average being 77 per cent. But margins are different for different stores depending, among other things, upon their size and the results of their man-

YORK Self-Contained Refrigerating Machines

are ideal for the Meat Market. They save money and furnish an independent source of satisfactory Refrigeration. The complete machine is mounted on

a rigid cast-iron base-easy to install. easy to operate, efficient, economical, and can be driven by any available power.

You may have always thought your Market was not large enough to justify the installation of Mechanical Refrigeration, but this is just the little machine you have been looking for. It is worth your investiga-

Write for Bulletin No. 70.

YORK MANUFACTURING CO. Ice Making and Refrigerating Machinery Exclusively.

YORK, PENNA

Generally speaking, the larger the store, the larger the cost of merchandise sold in relation to sales. ALL STEEL STOOLS This is due in part to the fact that the shop doing a large volume of business must of necessity carry a wider range of products, but primarily to the fact that prices are lower. In fact, one of the main, if not the most important factor making for large volume, is low prices.

Moreover, the large store has smaller operating expenses in terms of the volume of business done than competitors with that are Sanitary and Durable Easily washed and kept clean. Turn the hose onto them without in-jury to the finish. The baked enamel surface of business done than competitors with protects the steel parts from rust. No. 440 Ask for our No. 48 Black Folder of the All Steel Stool Line, illustrating and describing many patterns in all heights, with prices.

Maring a Profit and for Thece Suffering Cost of Merchandise Sold for Stores Making a Profit and for Those Suffering a Loss.—Stores making a profit have smaller cost of merchandise sold than those suffering a loss. This is equivalent to saying that the former have larger gross margins on the average than do the latter.

Plainwell Michiga Chicago Office, No. 9 So. Clinton St. New York City, 98 Park Place

Angle Steel Stool Company

in those losing money, 81.11 per cent. These are the figures for the three cities combined. For the different cities, the corresponding per cent are as follows:

New York: profit stores, 76.53; loss stores, 84.22.

Chicago: profit stores, 76.44; loss stores, 79.14.

Cleveland: profit stores, 74.63; loss stores, 78.91.

Fundamental Causes for Relatively High or Low Cost of Merchandise Sold with a Given Volume of Sales.

The causes which explain relatively high or low cost of merchandise sold relative to sales with a given volume of business are the same as those which explain relatively low or high gross margins. These are given later in the discussion of the latter topic, and do not need to be repeated here.

[The next installment will discuss "Gross Margins" in retail stores.]

necessary in order that posits may be made. But if they are to be made they must in all cases exceed the expenses.

The average cost of merchandise sold in profit stores is 76.15 per cent of sales;

How is this fact to be harmonized with the fact as given in the preceding paragraph that large stores—generally more profitable than small ones—have a larger cost of merchandise sold in terms of sales

volume of business as such does not guarantee a profit. It is true that expenses of the large stores are smaller as a per cent of sales than they are for the small ones, but they must be more than equaled by margins if profits are to

be made.

It is the size of the margin over which

an individual store has the least control. It is fixed primarily by price competition. The less the competition, the larger may be the margin. But high margins are not

Headquarters for

Packers' Genuine Vegetable Parchment and Waxed Papers

Kalamazoo Vegetable Parchment Co., - - - Kalamazoo, Mich.

New York Section

After an association of twenty-six years with Woodward & Dickerson, Philadelphia, Pa., Samuel D. Keim resigned on July 1st.

Prices realized on Swift & Company's sales of carcass beef in New York City for week ending June 28th on shipments sold out, ranged from 8.00 to 17.50 cents and averaged 14.53 cents per pound.

In view of the approaching bathing season Mrs. Fred Hirsch, wife of the business manager of the Bronx Branch, United Master Butchers of America, is advising her friends that water is not good for wrist watches.

A. Frank & Sons, wholesale dealers in calfs' heads, feet and tongues have removed from 789 First Avenue to larger and more commodious quarters at 419 East 44th Street. The firm name has been changed from A. Frank & Son to A. Frank & Sons.

Henry C. Woodruff, vice-president, The Brecht Company, New York, was in town for a few days after a winter spent in the South. He left for a trip through Canada and will spend the summer in a little fishing village near Quebec, where he expects to excel his Florida record for big hauls.

The Ladies' Auxiliary, United Master Butchers of America, held the last meeting for the season on Wednesday afternoon. Due to the terriffic heat, the attendance was not as large as expected and it was decided to hold the report of the convention and other important matters over until the first fall meeting.

Following is a report of the New York City Health Department of the number of pounds of meat, fish, poultry and game seized and destroyed in the City of New York during the week ending June 28, 1924: Meat—Manhattan, 2,984½ lbs.; Brooklyn, 1,170 lbs.; total, 4,231 lbs. Fish—Manhattan, 7,250 lbs.; Brooklyn, 74 lbs.; total, 7,324 lbs. Poultry—Manhattan, 15 lbs.; The Bronx, 40 lbs.; total, 55 lbs.

The meeting of the Washington Heights Branch, United Master Butchers of America, on Monday evening was almost entirely given over to the report of the convention proceedings at Rochester. The report was made by Charles Hembdt and keen interest was taken in the statistics given in the report of the national secretary, John A. Kotal. These statistics caused many of the members to figure their own business on the proper basis.

While in New York recently Mr. Joseph Seng and his two daughters and Mr. Charles Munkwitz of Milwaukee were entertained by Mr. and Mrs. A. F. Grimm, Mr. and Mrs. George Kramer and Mr. and Mrs. Moe Loeb. There were a number of others who wanted to entertain but were unable to do so as these popular Wisconsians had to return home. A royal welcome was given and that it was appreciated was proven by Mr. Seng's own words "the boys are too good."

Elinor Hembdt, the youngest daughter of Mr. and Mrs. Charles Hembdt, who took charge of the market while daddy and mother were attending the convention of the State Association of United Master Butchers of America, is on the honor roll of her school again this session. Although she was in the school only six months at the end of the last session and despite the rule that pupils must be in the school at least a year before being placed on the honor roll, the merits of her work were so pronounced that this honor was accorded her.

J. H. Rayner & Co., well known established exporters and importers, has been reorganized under the name of Rayner and Stonington, Inc. It will be conducted along the same lines as the old corporation with E. H. L. Stonington as president, Henry Kassner, treasurer; Joseph B. Cleaver, manager; Samuel Y. Coyne, secretary. The directors include the officers and Wilfred Heyworth, who is chairman of the Board of Directors of J. H. Rayner & Co., Ltd., Liverpool and London, and William U. Goodbody of Goodbody, Danforth & Glenn, counsellors at law.

On June 30th The Sinclair Sales Company moved from 115 South Market Street to 81-83 South Market Street, Boston. On account of the growth of the business it was necessary to move to larger quarters, after a period of a little less than eight years spent at the 115 South Market Street address. The company will occupy a five story building which has been remodeled into an up-to-date branch house. In addition to the provision department, beef shipped from the West will be handled. At the new location Manager Lombard will give special attention to the constantly increasing trade in Fidelity hams and bacon.

WHOLESALE DRESSED MEAT PRICES.

Wholesale prices of Western dressed fresh meats were quoted by the U. S. Bureau of Agricultural Economics at Chicago and three Eastern markets on Wednesday, July 2, 1924, as follows:

Date Date				
Fresh Beef-				-
STEERS:	CHICAGO.	BOSTON.	NEW YORK.	
Choice	\$16.50@17.00	\$14.50@15.00	\$15.00@16.50	\$17.00@18.00
Good	15.00@16.00	13.00@14.50	12.00@15.00	14.50@16.50
Medium	14.00@15.00	12.50@13.00	11.00@13.00	12.00@14.00
Common	11.00@12.50	10.00@12.00	8.00@11.00	9.00@12.00
Cows:				11.00@12.00
Good	13.00@14.00	10.00@11.50	11.00@12.50	
Medium	11.00@12.00	8.00@ 9.00	8.50@11.00	9.00@10.00
Common	8.50@10.50	7.50@ 8.00	7.50@ 8.50	7.50@ 9.00
BULLS:				
Good		9.50@10.50	*******	
Medium		8.50@ 9.50		
Common	7.50@ 7.25		8.00@ 9.00	
Fresh Yeal*-				
Choice	16.00@17.00		15.00@17.00	17.00@18.00
Good	14.00@15.00		13.00@15.00	15.00@16.00
Medium	12.00@14.00	10.00@12.00	11.00@13.00	11.00@14.00
Common	8.00@11.00	7.00 @ 9.00	8.00@11.00	7.00@10.00
Fresh Lamb and Mutton-				
LAMB:				
Spring	28.00@29.00	25.00@27.00	27.00@29.00	27.00@29.00
Spring	26.00@28.00	22.00@23.00	23.00@27.00	25.00@27.00
Choice	20.00@24.00	18.00@21.00	18.00@22.00	22.00@24.00
Good	15.00@18.00	12.00@17.00	14.00@18.00	20.00@22.00
Medium	15.00@18.00	12.00@11.00	11.00 @ 10.00	
Common				
YEARLINGS:	00 00 00 01 00	18.00@20.00	20.00@22.00	24.00@25.00
Good	23.00@24.00	14.00@17.00	18.00@20.00	20.00@23.00
Medium	20.00@22.00		15.00@18.00	
Common	15.00@20.00		15.00 @ 18.00	*******
MUTTON:				
Good	13.00@14.00	12.00@13.00	11.00@13.00	13.00@15.00
Medium	11.00@13.00	10.00@12.00	9.00@11.00	11.00@13.00
Common	8.00@10.00	8.00@ 9.00	7.00@ 9.00	8.50@11.00
Fresh Pork Cuts-				
LOINS:				
8-10 lb. average	15.50@17.00	15.00@16.00	16.00@18.00	17.00@19.00
10-12 lb. average	14.00@15.00	15.00@16.00	15.00@17.00	16.00@17.00
12-14 lb. average	13.00@14.00	14.00@15.00	14.00@15.50	14.00@16.50
14-16 lb. average	11.50@12.50	13.00@14.00	13.00@14.50	13.50@14.50
16 lbs. over	11.00@11.50	11.00@13.00	12.00@13.00	12.00@13.00
SHOULDERS:				
Skinned	9.00@10.00		9.00@11.00	10.00@11.00
PICNICS:				
4-6 lb. average	9.00@ 9.50	9.50@10.00	10.00@11.00	9.00@10.00
6-8 lb. average	8.50 @ 9.00	9.00@ 9.50	8.50@ 9.50	
BUTTS:			-	
Boston style	12.50@13.50		13.00@14.50	13.50@14.00
2000001 80710 111111111111111111111111111	_2 0 -2			-

*Veal prices include "hide on" at Chicago and New York.

A CLEVER ADVERTISING IDEA.

The idea of capitalizing on the nation's activities of the day was utilized by Armour and Company in their Star ham promotion work.

During the period of the Democratic National Convention at New York, a political window display, featuring Star ham being nominated to head the national meal ticket, was used extensively all over the

The display is made up in the form of a half page newspaper, burlesquing convention news, with a cartoon featuring the democratic donkey, his mouth watering, being served a ham by the company's well known "Ham What Am" man.

S e

h

d of

e

T

it

e

u

f

LOCAL AND PERSONAL

A new meat market, known as the Redwood City Meat Company, has been started in Redwood City, Calif., by Fred W. Danz and Henry McGraw.

The Woodhull Grocery and Meat Company has been incorporated in Woodhull, Ill., with a capital stock of \$10,000, by Nancy R. Shaklee, C. L. Shaklee and C. E.

A new meat market has been opened at 2808 West End, Nashville, Tenn., by F. J. Hemmen, George Bean and Edward Draper.

A. Kreutz has opened a new meat mar-ket at 508 Broadway, Saratoga Springs, N. Y.

A new meat market has been opened in Harrison, N. Y., by Wm. Loescher.

A new meat market is soon to be pened in Pennville, Pa., by W. L. and W. F. Crushong.

Herman Degenkolbe has sold his meat market in Sheboygan, Wis., to his son, Fred Degenkolbe.

George Robinett has opened a new meat market at 450 S. Meridian street, Indianap-

A new meat market and delicatessen has been opened at 4206-10 College avenue, In-dianapolis, Ind., by the Indiana Market Company.

George Kane has opened a new meat arket in St. Marys, W. Va. market in St. Marys,

The Allair Meat Market has been in-corporated in Newark, N. J., with a capi-tal stock of \$25,000 by Michael J. Quigley and others.

Myer Korn has sold his meat market and grocery in Oil City, Pa., to John Schlicht.

A new meat market has been opened in Hazelton, Pa., by Wm. Schroener. Paul Chittester has sold his meat market in Brookville, Pa., to W. A. Reitz and in Brookville, P. Guy R. Wetzell.

Louis Notarianni and his son Joseph plan to open a new meat market in Johnsonburg, Pa.

DeCampua Brothers have opened a branch meat market in Sharon, Pa.

A new meat market has been opened at 2125 Tenth street West, Seattle, Wash., by H. U. Chenier and M. M. Quinn.

H. J. Voege has opened a new meat mar-ket in Wenatchee, Wash.

The meat market of J. A. Carter in Kalama, Wash., was recently destroyed in a fire which did considerable other damage in the town.

L. C. Ives has opened a new meat market in Cashmere Valley, Wash.

J. L. Atwood has sold his meat market in American Fork, Utah, to Archie Boren. W. O. Packard has engaged in the meat business in Falls City, Neb.

Hansen & Ladwig have succeeded Han-sen & Nielsen in the ownership of the Blair Meat Market, Blair, Nebr.

John H. Baichtal has sold his stock of meats, etc., in Sac City, Ia., to Fred Stotts.

Chas. Vonasek has engaged in the meat business at Sterling, Neb.

John G. Meyer has purchased the I. Elsinger butcher shop, Pender, Neb., and will consolidate it with his own.

J. A. Burkley has become sole owner of the Milford Meat Market, Milford, Neb.

Tom Stephenson has purchased the North Meat Market in Lexington, Neb.

Joe Kubat has engaged in the meat business in Certe, Neb.

Paul M. Ebert has purchased the Peterson Meat Market in Valley, Neb.

Jim Wilson is about to open a butcher shop in Fullerton, Neb.

Al. Ulstrap has purchased the interest of his partner, C. W. Tudor, in their meat market in Ashland, Neb.

John Seymour has opened a meat shop



HAND FORGED ON THE ANVIL FROM DOUBLE SHEAR STEEL

John Wilson's Butcher Knives and Steels

1750 Standard of the World THE BEST THEN THE REST TODAY I. WILSON, SYCAMORE STREET, SHEFFIELD, ENG. Sole American Agents

H. BOKER & CO., Inc., NEW YORK, N. Y.

in Salem, Ore., to be known as the Valley Market.

The Peoples Market has been opened in The Dalles, Ore., by J. A. Beaudoin.
J. W. Wanamaker has engaged in the

meat business at 1888 Fremont, Portland,

W. L. Fellows has purchased the City Market in Culdesac, Ida., from E. H. Saxe. Gabriel J. Tesar has purchased the meat market of Kunc & Indra, Leigh, Neb.

Fred Noller has sold out his butcher shop in Courtland, Kas., to Hop Sanders, former owner.

M. A. Dowse has again taken charge of the City Meat Market in Great Bend, Kas.

H. W. Harris, of Hoxie, has purchased the meat market at 248 N. 13th street, Salina, Kas., from G. A. Frost.

Fred Streeter has purchased the Star Meat Market at 1339 Belmont street, Port-land, Ore., from C. R. Pool.

J. C. Snider has engaged in the meat business at 4215 41st street, Portland, Ore. A new meat market has been opened in Roberts, Wis., by Lawrence Bonnes.

James Roberts has sold his meat market at Albion, Nebr., to J. W. Porter.

A new meat market has been opened in Lexington, Nebr., by Thomas Stephen-

Gabriel J. Tesar has purchased the butcher shop of Kunc & Indra, Leigh,

Carpenter & Berry have reopened the Fort Laramie Meat Market, Fort Laramie, Wyo.

A. A. Simmunaci and John Olsen have purchased the Central Market, Atamtoc, Ia., from P. H. Rosenblatt.
W. V. Alton has engaged in the meat business in Randolph, Nebr.

Cecil Dennis is about to engage in the meat and grocery business in Glenrock,

Wyo.

Leonard Elsinger has sold his meat business in Pender, Nebr., to John G. Meyer.

Dan McKenzie will open a new meat market on Central avenue, Cawker City,

market on Central avenue, Cawker City, Kans.

H. L. Reboul, who has a meat market in Riley, Kans., has purchased and will operate a shop in Brougton, Kans.

C. N. Hanes, has purchased and will operate the Palace Meat Market in Halstead, Kans.

B. H. Watkins has opened a meat and grocery business at Independence, Kans.

Martin Chopp has purchased the meat business of Henry Popper, 909 W. Warren avenue, Detroit, Mich.

E Erickson has sold his meat business

For Sausage Makers

Patent Parchment Lined

SAUSAGE BAGS

SAUSAGE SEASONINGS

For Samples and Prices, write a

THE WM. G. BELL CO. **BOSTON**

Himmelsbach, M. E. Otto S. Schlich, C. E. Himmelsbach & Schlich
ENGINEERS AND ARCHITECTS
Specializing in Facking Houses, Abetoirs, Ice Making and Esfrigerating
Flants. Lard and Fat Bendering Flants,
Oil Refineries.

136 Liberty Street NEW YORK

at Third and D streets, La Verne, Calif., to B. F. Maxwell.
W. O. Moore and Everett DeBolt are opening a line of meats and groceries in Chandler, Ariz.

Chandler, Ariz.
W. J. Fannon has succeeded to the meat
W. J. Fannon &

Dusiness of Fannon & and grocery business of Fannon & Schwuckow, 704 E. Church St., Stockton,

Calif.

The meat and grocery establishment of G. Steinert in Sanger, Calif., has been damaged by fire to extent of \$11,000.

C. A. Pauley has purchased the interest of G. W. Bratton in the Sanitary Meat Market, Klamath Falls, Ore.

H. J. Gruen has purchased the business of the Campbell Meat Co., 1407 Sandy street, Portland, Ore.

C. Nasser has disposed of his interest in the Rainier Meat Co., Rainier, Ore.,

in the Rainier Meat Co., Rainier, Ore., to Fred Norris.

E. Gates has opened in the meat business in Eugene, Ore. Carl Slater, of Marysville Meat Co. has

opened a branch market at Lakewood,

John Kirschner & Sons have opened meat business at Fourth and Cherry streets, Marshfield, Wis.

NEW YORK MA	ARKET PRICES
LIVE CATTLE	PPESH DOPK CUTS
Steers, medium	Fresh pork loins, Western, 10-12 lbs. avg17 @18
Cows. canners and cutters\$ 1.75@ 3.75	Fresh pork tenderloins52 @55
Bulls, bologna\$ 4.50@ 4.85	Frozen pork loins, 10-12 lbs. avg16 @17 Ol Frozen pork tenderloins40 @45
LIVE CALVES.	Shoulders, city, 10@12 lbs. avg
Calves, veal prime, per 100 lbs\$11.50@11.75	Shoulders, Western, 10@12 lbs. avg10 @11 Butts, boneless, Western
Calves, veal common to medium\$ 7.00@11.00 Calves, veal, culls, per 100 lbs\$ 6.00@ 7.00	Butts, regular Western14 @15
Caives, veai, cuits, per 100 ibs 5.00@ 1.00	Fresh hams, city, 8@10 lbs. avg18 @19 Sq Fresh hams, Western, 10@12 lbs. avg16 @17
LIVE SHEEP AND LAMBS.	Fresh picnic hams, Western, 6@8 lbs. avg.10 @11
Lambs, yearlings unshorn, prime, 100 lbs.\$15.00@15.50	Extra lean pork, trimmings
Sheep, ewes, prime, 100 lbs\$ 5.00@ 6.00 Sheep, ewes, common to good, 100 lbs\$ 2.50@ 3.50	Fresh spare ribs 8 @ 9
	Raw leaf lard12 @13
LIVE HOGS.	BONES, HOOFS AND HORNS.
Hogs, heavy	Round shin bones, avg. 48 to 50 lbs., Cr
Hogs, 140 lbs 7.85@8.00	Flat shin bones, avg. 40 to 45 lbs., per Cr
Pigs, under 70 lbs	100 pcs 90.00@100.00 Black hoofs, per ton 40.00@ 50.00
awagas	Striped hoofs, per ton
DRESSED BEEF.	White hoofs, per ton
CITY DRESSED.	100 pcs @140.00 Cr
Choice, native, heavy	Horns, avg. 7% oz. and over, No. 1s300.00@325.00 Horns, avg. 7% oz. and over, No. 2s250.00@275.00
Native, common to fair16 @16½	Horns, avg. 71/2 oz. and ever, No. 3s200.00@225.00
WESTERN DRESSED BEEF.	DANGE MEATO
Native steers, 600@800 lbs14 @15	FANCY MEATS.
Native choice, yearlings 400@600 lbs16 @17 Western steers, 600@800 lbs13 @14	Fresh steer tongues, untrimmed. @30c a pould Fr Fresh steer tongues, L. C. trim'd @38c a pound Fr
Texas steers, 400@600 lbs 9 @12	Calves, heads, scalded @65c a piece Fr
Good to choice heifers	Sweetbreads, veal
Common to fair cows 9 @11	Beef kidneys
Fresh bologna bulls @ 9	Mutton kidneys @ 8c each Livers, beef @16c a pound
BEEF CUTS.	Oxtails @12c each
Western. City.	Hearts, beef
No. 1 ribs	Lamb fries @10c a pair
No. 3 ribs @12 18 @19	BUTCHER'S FAT.
No. 1 loins	Shop fat
No. 3 loins	Breast fat
No. 1 hinds and ribs26 @28 22½@24 No. 2 hinds and ribs23 @24 19 @21	Cond. suet
No. 3 hinds and ribs19 @20 18 @181/2	Bones @25 So
No. 1 rounds	SPICES.
No. 3 rounds	Whole. Ground. Pepper, Sing., white 18¼ 19¼ Te
No. 1 chucks	Pepper, Sing., black 11 14
No. 3 chucks @ 5 8 @ 9	Pepper, red
Bolognas	Cinnamon 101/4 141/4 B
Rolls, reg., 4@6 lbs. avg	Cloves
Tenderloins, 4@5 lbs. avg	Ginger 28 26
Shoulder clods	Mace 66 71
DRESSED CALVES.	CURING MATERIALS.
Prime18 @19	In lots of less than 25 bbls,: Bbls. per lb.
Choice	Double refined saltpetre, granulated 64c 64c Double refined saltpetre, small crystals74c 74c
Good	Double refined nitrate soda, granulated 4½c 4%c Double refined nitrate soda, crystals 5½c 5½c
Common 9 @11	In 25 barrel lots:
DRESSED HOGS.	Double refined saltpetre, granulated 6%e 6c Double refined saltpetre, small crystals 7%c 7c
Hogs, heavy @111/4	Double refined nitrate soda, granulated 4%c pl
Hogs, 180 lbs	Double refined nitrate soda, crystals 5%c 5c Carload lots:
Hogs, 140 lbs@11%	Double refined nitrate of soda, granulated 4%c No. No.
Pigs, 80 lbs@11%	Double refined nitrate of soda, crystals 5c 4%c Fi
DRESSED SHEEP AND LAMBS.	GREEN CALFSKINS.
Lambs, choice spring26 @27	Kip. H kip. tr 5-9 914-12141214-14 14-18 18 up.
Lambs, poor grade	Prime No. 1 veals. 20 2.40 2.65 2.90 3.75
Sheep, medium to good	Buttermilk No. 2. 15 1.85 2.05 2.30
Sheep, culls	No. 3
SMOKED MEATS.	DRESSED POULTRY.
Hams, 8@10 lbs. avg	FRESH KILLED.
Hams, 12@14 lbs. avg	Fouls—Fresh—dry picked—12 to box:
Picnics, 4@6 lbs. avg	Western, 60 to 65 lbs. to dozen, lb29 @30
	Western, 48 to 54 lbs, to dozen, lb27 @28
Picnies, 6@8 lbs. avg	Western, 43 to 47 lbs. to dozen, lb25 @26
Picnics, 6@8 lbs. avg	Western, 43 to 47 lbs. to dozen, lb25 @26 Western, 36 to 42 lbs. to dozen, lb24 @25
Picnics, 6@8 lbs. avg. 11½@12 BeDettes, 6@8 lbs. avg. 13 @14 Beef tongue, light. 30 @34 Beef tengue, beavy. 35 @40 Bacom, boneless, Western. 17 @18	Western, 43 to 47 lbs. to dozen, lb
Picnics, 6@8 lbs. avg. 11½@12 BoTettes, 6@8 lbs. avg. 13 @14 Beef tongue, light. 30 @34 Beef tongue, heavy. 35 @40	Western, 43 to 47 lbs. to dozen, lb

Western, 43 to 47 lbs. to dozen, lb30 @34 Western, 36 to 42 lbs. to dozen, lb29 @33
Western, 36 to 42 lbs. to dozen, lb29 (233) Western, 30 to 35 lbs. to dozen, lb28 (232)
Fowls-Iced-dry nicked, milk fed-barrels:
Western, dry picked, 5 lbs. and over, lb24 @26
Western, dry picked, 4½ lbs. each24 @25 Western, dry picked, 3½ lbs. each, lb20 @22
Western, dry picked, 3½ lbs. each, lb 20 @22 Old Cocks—dry picked—boxes Western, dry picked, 4½ to 5½ lbs., boxes 24 @25 Western, scalded, bbls 23 @25
Western, dry picked, 4½ to 5½ lbs., boxes
Western, scalded, bbls23 @25
Long Island, No. 1, per lb
Squabs-
White, 12 lbs. to dozen, per dozen 7.00@8.00 White, 10 lbs. to dozen, per dozen 5.50@6.00
Culls, per doz
LIVE POULTRY.
Broilers, colored, via express43 @45
Ducks, via express
Creamery, firsts (90 to 91 score)40 @41 Creamery, seconds
Creamery, lower grades
DIAMEDO
BUTTER.
Creamery, extra (92 score)
Creamery, firsts (90 to 91 score) 41 @42 Creamery, seconds 37 @38½
Creamery, lower grades35 @361/2
7000
EGGS.
Fresh gathered, extra, per doz. 31 @32 Fresh gathered, extra first 28 @29 Fresh gathered, firsts 27 @27½
Fresh gathered, firsts
Fresh gathered, checks, fair to choice dry231/2@24
FERTILIZER MATERIALS.
BASIS NEW YORK DELIVERY.
Ammonium sulphate bulk f o b
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate. bulk. f. o. b works. per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried,11% ammonia. 15% B. P. L., bulk, f. o. b. fish factory Fish guano, foreign, 13@14%, ammonia, 10% B. P. L. Fish scrap, acidulated, 60%, ammonia. 3% A. P. A., f. o. b. fish factory. Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, July-Aug. Tankage, ground, 10%, ammonia, 15% B. P. L. bulk. Tankage, unground, 9-10% ammonia. Phosphates. Bone meal, steamed, 3 and 50 bags per ton Bone meal, raw, 4½ and 50 bags per ton, 16%. Potash.
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried,110/2, ammonia. 150/2 B. P. I., bulk, f. o. b. flah factory Fish squano, foreign, 13@140/2, ammonia, 10% B. P. L. Fish scrap acidulated, 80% ammonia. 3% A. P. A., f. o. b. flah factory. Soda Nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, 100 lbs., spot B. P. L. bulk. Tankage, unground, 9-10% ammonia, 15% B. P. L. bulk. Tankage, unground, 9-10% ammonia, 2.35 and 10c Phosphates. Bone meal, steamed, 3 and 50 bags per ton Bone meal, raw, 4½ and 50 bags per ton Acid phosphate, bulk, f. o. b. Balt., per ton, 16%.
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried,11% ammonia. 15% B. P. L., bulk, f. o. b. fish factory Fish ganao, foreign, 13@14%, ammonia, 10% B. P. L. Fish scrap, acidulated, 60%, ammonia. 3% A. P. A., f. o. b. fish factory. Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, July-Aug. Tankage, ground, 10%, ammonia, 15% B. P. L. bulk. Tankage, unground, 9-10% ammonia. Phosphates. Bone meal, steamed, 3 and 50 bags per ton Bone meal, steamed, 3 and 50 bags per ton 10%. Potash. Kalnit, 12.46%, bulk, per ton. Muriate in bags, basis 80% per ton @2.55 @2.60 @3.00 3.25 and 10c 2.75 and 50c @2.20 @2.30 @2.30 62.60 @3.00 **Commonia* **Commonia*
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried,11% ammonia. 15% B. P. L., bulk, f. o. b. fish factory Fish guano, foreign, 13@14%, ammonia, 10% B. P. L. Fish scrap, acidulated, 6%, ammonia, 25% A. P. A., f. o. b. fish factory. Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, July-Aug. Tankage, ground, 10%, ammonia, 16% B. P. L. bulk. Tankage, unground, 9-10% ammonia. Phosphates. Bone meal, steamed, 3 and 50 bags per ton Bone meal, raw, 4½ and 50 bags per ton. Acid phosphate, bulk, f. o. b. Balt., per ton, 10%. Potash. Kalnit, 12.4%, bulk, per ton. Muriate in bags, basis 80% per ton Sulphate, in bags, basis 80%, per ton Sulphate, in bags, basis 90%, per ton
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried,11% ammonia. 15% B. P. L., bulk, f. o. b. fish factory Pish guano, foreign, 13@14%, ammonia, 10% B. P. L. Fish scrap, acidulated, 60%, ammonia, 25% and 10c Pish scrap, acidulated, 60%, ammonia, 3% A. P. A., f. o. b. fish factory. Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, July-Aug. Tankage, ground, 10%, ammonia, 15% B. P. L. bulk. Tankage, unground, 9-10% ammonia. Phosphates. Bone meal, steamed, 3 and 50 bags per ton Bone meal, steamed, 3 and 50 bags per ton, 10% Potash. Kalnit, 12.46%, bulk, per ton. Acid phosphate, bulk, f. o. b. Balt., per ton, 10% Potash. Kalnit, 12.46%, bulk, per ton. Muriate in bags, basis 80% per ton BultTER AT FOUR MARKETS.
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried,119 ammonia. 15% B. P. L., bulk, f. o. b. fish factory Fish guano, foreign, 13@14%, ammonia, 10% B. P. L. Fish scrap, acidulated, 60%, ammonia. 3% A. P. A., f. o. b. fish factory. Soda nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, July-Aug. Tankage, ground, 10%, ammonia, 15% B. P. L. bulk. Tankage, unground, 9-10% ammonia. Phosphates. Bone meal, raw, 4½ and 50 bags per ton Bone meal, raw, 4½ and 50 bags per ton. Acid phosphate, bulk, f. o. b. Balt., per ton, 10%. Potash. Kalnit, 12-40%, bulk, per ton. Sulphate, in bags, basis 80% per ton Sulphate, in bags, basis 80% per ton BUTTER AT FOUR MARKETS. Wholesale prices of 92 score butter at
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs. Ammonium sulphate, double bags, per 100 lbs., f. a. s., New York. Blood, dried, 15-16% per unit. Fish scrap, dried, 110% ammonia. 15% B. P. L., bulk, f. o. b. fish factory Fish scrap, dried, 110% ammonia. 15% B. P. L., bulk, f. o. b. fish factory. Soda Nitrate, in bags, 100 lbs., spot Soda nitrate, in bags, July-Aug. Tankage, ground, 10% ammonia. 15% B. P. L. bulk. Tankage, unground, 9-10% ammonia. Bone meal, steamed, 3 and 50 bags per ton Phosphates. Bone meal, raw, 4½ and 50 bags per ton. Potash. Kalnit, 12.4% bulk, per ton. Buly-Aug. Potash. Kalnit, 12.4% bulk, per ton. Buly-Aug. Potash. Kalnit, 12.4% bulk, per ton. Buly-Aug. Potash. Wholesale prices of 92 score butter at Chicago, New York, Boston and Philadelphia for week ending June 26, 1924. June 20 21 22 23 24 25 Chicago 40 404 404 394 393, 39 39, 39 New York 42 424 424 424 424 424 Boston 424 424 424 424 424 424 424 Boston 424 424 424 424 424 424
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs
Ammonium sulphate, bulk, f. o. b works, per 100 lbs

June Chicago	20	21 401/4	22 401/4	23 39%	24 39%	25	
Chicago	* 300						
New York	.42	4216	421%	42%	42	4116	
Boston	4914	4216	4917	4216	42	42	
			20m 1/3				
Philadelphia	.4214	43	4216	4216	42	42	

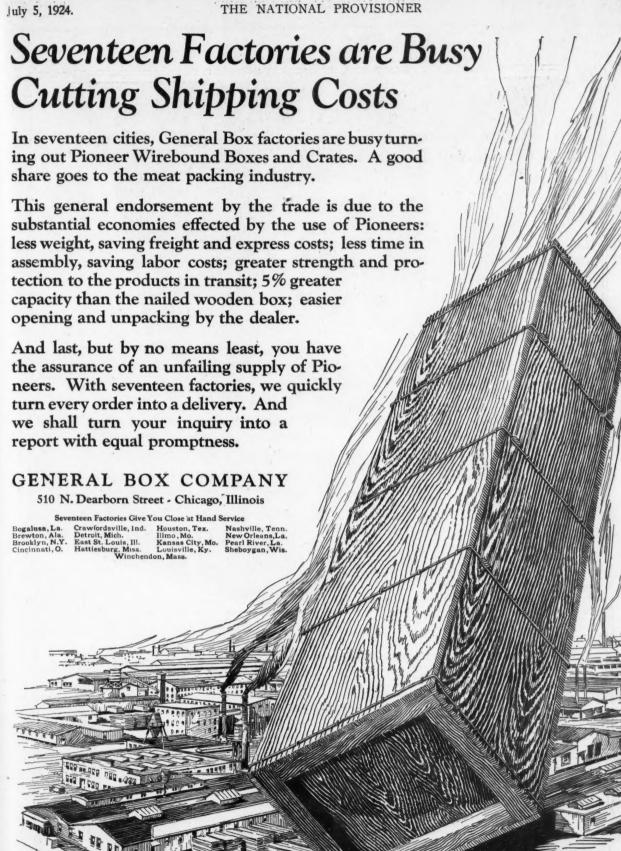
Chicago New York Boston Philadelphia	This week. 62,482 78,082 34,830 26,274	Last week. 70,507 78,010 36,704 25,569		1924. 1,748,645 1,599,597 641,415	1,733,819 581,640
Total	201,668	210,790	201,090	4,496,915	4,350,850

Cold storage movement (lbs.):

	Into	Out of		Cor. day of
Chicago	storage.	storage. 2.560 35.051	June 20. 11.516.282	last year. 10.821.725
New York	525	,848 44,541	8,088,359	9,312,626
Boston Philadelphia		,749 29,894 ,038 24,110		
Total	1,630,	195 133,596	33,149,864	29,686,757

71% 100

7.80





CIVE your boys and girls good, growth-helping, muscle-making food, so that they can work well in school and play well out-doors. Spread their bread with Wilson's Certified Oleomargarine. It contains the rich food elements so essential for the growing child. Rich, creamy in flavor, appetizing, satisfying in taste—a product that proves itself to have the quality which earns our Certified label and backs up our "money-back" guarantee.

A SK your dealer for Wilson's Certified Oleomargarine; use it in your cooking, serve it on your table. It is made in the cleanest churnery you can find; it is made according to our standards of preparing a food product with respect. You be the sole judge of its merit.

If for any reason you do not consider it a pure, wholesome, healthful, economical food—there's our "money-back" pledge on each package.

Thio mark WILSON & CO. your guarantee"

The Wilson label protects your table



ALLIED PACKERS

INCORPORATED

CHICAGO, ILL.

HONEY BRAND--HAMS--BACON GOOD WILL BRAND -- LARD -- BUTTER -- EGGS



oods of Unmatched Quality

Hams, Bacon, Lard, Sausage SOUTHERN ROSE COMPOUND

The Wm. Schluderberg-T. J. Kurdle Co. Baltimore, Md. **Meat Packers**

PORK and BEEF

A Full Line of Dry Sausage

AUSTIN. Minnesota

St. Louis Independent Packing Co. BEEF AND PORK PACKERS AND WESTERN DRESSED BEEF AND PORK

Mixed Cars of Beef, Pork and Provisions a sp Branch House: PITTSBURGH, PA. Eastern Representatives: BOSTON, P. C. rate INDEPENDENT LINE of Refrigerator Care
Main Office and Packing House: ST. LOUIS
W. B. Cassell: NEW YORK, L. M. Christian ntatives: BOSTON, P. G. Gray Co.; BALTIMORE, W. B. Ca

F. G. VOGT & SONS, Inc., Pork Packers

LIBERTY BELL BRAND Hams, Bacon and Lard

PHILADELPHIA, PA. Canners and Lard Refiners

30th and Race Streets



HAMS BACON LARD AND SAUSAGE ARNOLD BROS.

Packers

656-666 West Randolph St., Chicago

The Rath Packing Co., Waterloo, Iowa Pork and Beef Packers

BLACKHAWK HAMS AND BACON

STRAIGHT AND MIXED CARS OF PACKING HOUSE PRODUCTS

HE UNITED DRESSED BEEF COMPAN

OF NEW YORK

CITY DRESSED BEEF

Packers and Exporters Barrel Beef

Packer Hides, Oleo Oils, Stearine, Cracklings, Stock Food Tallows, Horns and Oattle Switches

> 43d and 44th Streets First Avenue and East River Telephone Murray Hill 2300

George Kern, Inc.

Wholesale Provisioners

NEW YORK CITY

High Grade Bologna, Sausages, Hams, Bacon, Pure Lard

J. T. McMILLAN COMPANY, St. Paul Minn. PACKERS AND PROVISION DEALERS

Write or wire us when you wish to buy the finest quality of Lard or S. P. Meats

HEIL PACKING CO.

ST. LOUIS

Complete Line of Pork Products Hams, Bacon, Lard

C. A. Burnette Co.

827-839 W. 22nd St., Chicago, Ill.

Car or Barrel Lots Solicited

Quality

Sausage Material, Beef Hams Beef Cuts, All Grades

INDIANAPOLIS ABATTOIR CO.. Indianapolis. Ind.

Beef and Pork Packers

Shippers of Dressed Beef, and Hogs

BRANCH New York, 448 West 14th Street
New Haven, Conn., 203 State Street
Rochester, N. Y., Upton Cold Storage.

attoir Co., 215 E. Jefferson St., Louisville, Kv. Mixed Cars a Specialty

CORKRAN, HILL & C BEEF AND PORK PACKERS

Dressed Beef, Butter, Cheese, Eggs and Butterine
PACKING HOUSE AND GENERAL OFFICES, Union Stock Yards, BALTIMORE, MD. City Market 221-27 S. Howard St.



Hnderwood Brand

Omaha Packing Company

Hork Hackers Manufacturers of High Grade Sausage

Chicago, H. S. A.

Jacob Dold Packing Co.

Packers and Provisioners

Niagara Brand Hams and Bacon White Rose Pure Lard



A Mark of Quality

Buffalo

Wichita

Omaha

Liverpool

Producers of the celebrated "Niagara" brand Hams for boiling. Write or wire for prices



ASK THEM!

ONE HUNDRED of the leading packers and wholesalers of the Middle West, East and South are selling HAMMOND'S



MISTLETOE - KO-KO

and other brands of

Oleomargarine

Let us refer you to some of them—they can tell you interesting things about the possibilities of our line.

The G. H. Hammond Co.

CHICAGO, ILL.

Paradise

Brand

Hams Bacon Lard

Theurer-Norton Provision

CLEVELAND Packers

VHITE LILY BRAND HAMS AND BACON "Try 'em-they're different" DUNLEVY-FRANKLIN COMPANY, PITTSBURG, PA.

Choice City Dressed Pork Products

OUR city dressed pork products include all Fresh Pork Cuts, Boiled Ham, Sausage, Supreme Ham and Bacon. For high uniform quality, these products are excelled by none.

JOSEPH STERN & SONS

Branch of the North American Provision Company 616 West 40th Street, New York City

OttoStahl

At All Good Delicatessen Stores And Food Shops

3rd Avenue at 127th Street "Ready to Eat Meats" New York City

Phone 4400



The Cudahy Packing Company U.S. CHICAGO OMAHA KANSAS CITY SIOUX CITY LOS ANGELES SALT LAKE WICH

Puritan Hams-Bacon-Lard

JOHN J. FELIN & CO., Inc.

4142-60 GERMANTOWN AVENUE **PHILADELPHIA**

PORK AND BEEF PACKERS AND SAUSAGE MANUFACTURERS PHILADELPHIA SCRAPPLE IN SEASON

NEW YORK BRANCH, 407-9 W. 13th STREET

1874

BOYD, LUNHAM & CO. PACKERS and LARD REFINERS

Office 208 So. La Salle Street

CHICAGO, ILL.

Packinghouse Union Stock Yards

1924

The Independent Packing Company

Forget-Me-Not Brand PURE LARD

Union Stock Yards, Chicago
Beef and Pork Packers and Provisieners
Curers of Finest and Select Brands

Manufacturers of ges and Specialties of all kinds HAMS AND BACON Branch Offices-Produce Exchange, New York; 113 State Street, Boston; 13 Harrington Street, Liverpool, England

1924

The J. & F. Schroth Packing Co. Cincinnati, Ohio

FOUNTAIN 1871 BRAND **PRODUCTS**

Carload Shippers of Green, Sweet Pickle and Dry Salt Meats

DETROIT Sullivan Packing Company MICHIGAN

PRODUCERS OF

Hams Bacon Sausage CARLOAD SHIPPERS OF DRY SALT, GREEN AND PICKLED MEATS

PORK PACKERS ST. LOUIS, U.S. A. X-RAY BRAND—HAMS-BACON-LARD

EXPORTERS - SHIPPERS of MIXED CARS-PORK, BEEF and PROVISIONS, FANCY SAUSAGE Cable Address: KREY, St. Louis. Eastern Representatives: Boston, J. R. POOLE CO.

PITTSBURGH PROVISION & PACKING CO., BEEF AND PORK PACKERS

Oleo Oils, Oleo Stearine, Tallow, G reases, Beef Casings, Fertilizers, etc.

Crescent Brand Hams, Lard, Breakfast Bacon All Our Products are U. S. Government Inspected THE CELEBRATED BRAND IRISH HAMS AND BREAKFAST BACON



Sineo

JOHN MORRELL & CO.

Sinc



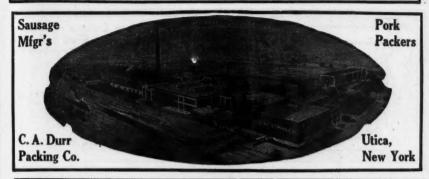
"MORRELL'S PRIDE" MEATS

Sausage—Canned Food Products—Mince Meat "Red Letter" and "Snow Cap" Brands Lard

FRESH BEEF, PORK, VEAL, MUTTON, ETC.

Ottumwa, Iowa

Sioux Falls, S. D.



ARBOGAST & BASTIAN COMPANY

WHOLESALE SLAUGHTERERS OF CATTLE, HOGS, SHEEP AND CALVES MEAT PACKERS and PROVISION DEALERS

U. S. GOVERNMENT INSPECTION

ALLENTOWN, PA.

John P. Squire & Company

Pork Packers

NEW YORK OFFICE

P. O. Bex 5325 BOSTON, MASS. PACKING HOUSES Cambridge, Mass.

A. H. March Packing Co. Pork Packers

ASK FOR THE Celebrated Diamond A. H. M. Brand
Hams, Bacon and Lard Known Since 1873 BRIDGEPORT. PA.

The Columbus Packing Company



Pork&Beef Packers

Columbus, Ohio Seven Schenk Bros., Managers

C. F. Vissman & Co., Inc.

Louisville, Ky.

Dressed Beef Derby Brand Hams Bacon Lard

Straight and Mixed Cars
Green or Cured Meats

ESTABLISHED 1845

The Layton Company

Pork Packers & Curers of Choice Selected

Hams and Bacon

and Benderers of

Guaranteed Pure Lard

Quality Our Hobby for 79 Years

Milwaukee, Wisconsin.

J. S. HOFFMAN COMPANY, Inc.

CHEESE - SAUSAGE - CANNED MEATS

CHICAGO WE HAVE BUILT OUR REPUTATION ON:—QUALITY AND PRICE

NEW YORK

1864

LOUIS PFAELZER & SONS, Inc.

1924

UNION STOCK YARDS, CHICAGO, ILL.

Shippers of Straight and Mixed Car Loads Beef, Pork, Lamb and Provisions

DOMESTIC and EXPORT

We specialize in Boneless Meats and Beef Cuts. "Sun" Brand Hams, Bacon and Lard

CONSOLIDATED DRESSED BEEF CO., STOCK YARDS PHILADELPHIA CAR LOTS SHIPPED TO ANY PART OF THE U.S.

We Invite New York and New Jersey butchers to visit us. Philadelphia is only two hours from New York

EAST SIDE PACKING CO., East St. Louis, Ill. Pork and Beef Packers

EXPORTERS AND SHIPPERS OF STRAIGHT AND MIXED CAR LOADS OF BEEF AND PROVISIONS F. C. ROGERS, 431 W. 14th St., New York City; 267 N. Front St., Philadelphia, Pa., Representative



Hams Bacon Lard

ESTABLISHED 1884

Dry Salt Meats Green Meats Sweet Pickled Meats

Miller & Hart - Chicago

FIDELITY

HAMS BACON LARD SAUSAGE

SURELY SATISFY

PIGS' FEET in glass jars Wonderful Sellers

Made by

T. M. SINCLAIR & CO., LTD. Cedar Rapids, Iowa

BRANCH HOUSES-

New York, N. Y. Boston, Mass-Philadelphia, Pa. Portland, Ore.

Des Moines, Iowa Peoria, Ill. Davenport, Ia. Chicago, Ill.

QUALITY

SERVICE

Sausage Meats, Beef Cuts and Choice **Dried Beef**

HARRY MANASTER & BRO.

1018-1032 West 37th Street U. S. Yards CHICAGO, ILL.

EASTER BRAND

Meat Food Products

Manufacturers of Celebrated "Easter" Brand Hams, Bacon, Lard and "Tacefine" Pork Sausage.

The Danahy Packing Co. Buffalo, N. Y.

U. S. Govt. Inspected Est 383

Brennan Packing Co. PORK PACKERS Quality, Our Hobby

Write or Wire Us for Prices

Cor. Thirty-Ninth St. and Normal Ave.

U. S. YARDS CHICAGO



From the very Center of the Hog Belt of Iowa

ocated as we are, in the center of the corn and

Hucker's VOWANA Pork Products

delicious tendemess and flavor for which a Porkers have become world-famed, and e's the secret of the supreme goodness of ker'slowans Hams, Baconsandpureleaflard. We solicit inquiries from carload to of all green and cured cuts.

JACOB E. DECKER' & SONS

GUGGENHEIM BROS. 1924

U. S. Yards, Chicago, Ill.

SLAUGHTERERS AND PACKERS

Shippers of Straight and Mixed Carlots of Beef, Sausage Meat, Boneless Beef Cuts, Cured and Smoked Meats, etc. Beef Casings



GREENWALD PACKING CORPORATION

BALTIMORE, MD.

Dependable Brand Products

Beef Lamb Cooked Hams Chipped Beef

Veal Lard



PACKERS -

1737-1815 LARRABEE STREET.

CHICAGO,

NORTH PACKING & PROVISION CO.

MANUFACTURERS NORTH STAR BRAND PORK PRODUCTS Packers, Jobbers and Exporters of Provisions

Boston Store General Office and Packing House S7 SOUTH MARKET STREET SOMERVILLE, MASS.

HATELY BROTHERS COMPANY CHICAGO

PURE LARD AND MEATS FOR EXPORT

Real Sausage Co.

2710, 2712, 2714 Poplar Avenue

Chicago, Ill.

High Grade Provisions, Sausages, Bolognas, Pickled and Smoked Meats

Telephone Victory 7200 Private Exchange all Departments

Wilmington Provision Co.



Wilmington, Delaware

Slaughterers of

Hogs, Cattle, Lambs, Calves

Manufacturers of

Fine Sausage

U. S. Government Inspection



KINGAN & Co.

PORK and BEEF **PACKERS**

Producers of the Celebrated "RELIABLE"

Brand

HAMS-BACON-LARD

Main Plant at INDIANAPOLIS,

NEW YORK, N. Y. SYRAGUSE, N. Y. JAGKSONVILLE, FLA. TAMPA, FLA. RICHMOND, VA. NORFOLK, VA. AYLANTA, QA.

PHILADELPHIA, PA. HARRISBURG, PA. PITTSBURGH, PA. BALTIMORE, MD. WASHINGTON, D. C. COLUMBUS, O. SAN FRANCISCO

INDIANA

Boneless Beef and Veal



742-44 W. 45th Street CHICAGO

Price

Quality

Service

Oscar Mayer & Co. **Packers** Approved

> LARD - SAUSAGES "Unusually Good"

Chicago New York Washington Boston

Milwaukee

T. T. KEANE CO.

Washington Dressed Beef

General Offices: 619-621 B. St., N. W.

Hotel Supplies: 618 Penn Ave., M. W.

Washington, D. C.

Abattoir, Bennings, D. C.

CABLE ADDRESS BYDUCTSCO.

Packing House By-Products Co., Inc.

40 RECTOR STREET, NEW YORK

The wide experience of our personnel is always at your service on
the selling of your by-products of every description; as is also our
thorough practical knowledge on manufacturing and grading.

CONSOLIDATED RENDERING COMPANY

40 North Market Street

Boston, Mass.

MANUFACTURES TALLOW, GREASE, OLEO OIL AND STEARINE DEALERS IN HIDES, SKINS, PELTS, WOOL AND FURS

EMIL KOHN, Inc. Office and Warehouses and Warehouse and Wareho

Ship us a small Consignment and see how much better you can do. Results Calfskins
Talk! Information gladly furnished.

The International Provision Co. FINE PROVISIONS

33 to 43 Degraw St., BROOKLYN, N. Y. Cable Address, Hazelyork, Brooklyn

J. M. Denholm Bros. & Co. Beef and Pork Packers facturers of the Famous Keyst Hams, Bacon and Lard PITTSBURGH, PA.

"None Better in the Country"



Shafer & Company

Lambard St. from 5th to 8th BALTIMORE, MD. Howard R. Smith, President

The E. KAHN'S SONS CO.

Beef and Pork Packers

"American Beauty" Ham Bacon Lard

> Car-load shippers of Fresh Dressed Beef and Calves

Send us your inquiries

Cincinnati, Ohio

LOVELL

(U. S. A.) LTD.

320 Produce Exchange **NEW YORK**

EXPORTERS OF PORK PRODUCTS

London, Liverpool, Manchester, Glasgow, Bristol, Paris

Lovell & Christmas, Ltd. of England, have 20,000 retail and jobbing customers on their books and can offer very large direct distribution to American and Canadian packers.

Banks—
Bank of America, Equitable Trust Company

A. F. Lopez, Vice-President

E.W. SKIPWORTH TRAFFIC

Rates—Claims—Service Analyzed—Adjusted
Specializing Meat Packers and Allied Industries
803-4 Transportation Bidg., CHICAGO.
Telephone Harrison 5951 20 Years Experience

Cross, Roy, **Eberhart** & Harris

Postal Telegraph Building CHICAGO, ILL.

Established 1893

Provision Dept.

Handled by practical men in packing-house buying and selling.

A. E. Cross E. L. Roy A. L. Eberhart Lacy J. Lee Z. K. Waldron E. L. Hicks, Jr.

Grain Dept.

Siebel C. Harris Specializes on "Hedging" and "Spreading" business.

MEMBERS:

Chicago Board of Trade Minneapolis Chamber of Commerce Winnipeg Grain Exchange New York Produce Exchange Duluth Board of Trade

OWNERS AND OPERATORS OF

White City Provision Co.

A modern curing and storage warehous

ARTHUR DYER

BROKER 438 Produce Exchange New York, N. Y.

Specialties: All packing house product; all canned goods. Codes: Armsby's Cross. Territory Covered: New York City and ad-

Jacent.

References: Anyone and everyone who knows
me: Battery Park National Bank.

Established twenty years and, like Johnnie
Walker, still going strong. On the base for
more business of the straight, clean-hitting
style. No curves or spit balls or anything
of that cort.

GEO. H. JACKLE BROKER

40 Rector St., NEW YORK

Tankage Liquid Stick Bone Meal Cracklings

Rload Bones Hoofs Horns

Let Me Sell Your By-Products

W. P. Battle & Co. Cotton Seed Products 57 & 58 PORTER BLDG. Memphis,



Increase Your Sausage Sales

Packers tell us that Perfection Sausage Molds have doubled and trebled their sales on minced hams and other sausages. Molds sausage into square uniform shape that is easily and uniformly sliced—pay their original cost in time and labor saved in cooking, smoking and cooling.

Write for our new booklet which tells the story completely. Also samples and prices.

Sausage Mold Corporation

INCORPORATED

918 East Main Street, Louisville, Kentucky



Thomson & Taylor Company

Recleaned Whole and Ground Spices for Meat Packers

Fred B. Carter BROKER

Packing House Products

24 Se. Delaware Ave.

C. ZAUN

PORK AND BEEF PRODUCTS

Consignments Receive Promps Attention
410 PRODUCE EXCHANGE NEW YO

The Horn & Supply Co. Horns, Hoofs, Horn Tips and Waste

Dealers in Manufacturers of Pressed Horn and Hoof

D. GECK, Inc.
80 Maiden Lane, NEW YORK Phone John 151
We intend to become the largest handlers of
CRACKLINGS AND TANKAGE
TALLOWS AND GREASES
in these United States. Watch us grow. o John 1519

WANTED AND FOR SALE

Advertisements under this head \$2.00 per inch per insertion. Remittance must accompany order.

How About Your Yields?

Are they what they ought to be? Do you ant to better them? Practical man with 20 years experience will make contract based on W-638, The National Provisioner, Old Colony Bldg., Chicago, Ill.

Superintendent or Manager

Do you need a superintendent or manager who will put the quality of your product and your operating costs where "Selling Right" won't be different? If so address W-643, The National Provisiener, Old Colony Bidg., Chicago, Ill.

Want Sausage Maker

Wanted, by small packer in Western Pennsylvania, first-class sausage maker. Must have first-class references. W-642, The National Provisioner, 15 Park Row, New York, N. Y.

Sausage Making Expert

Who knows product, finances and management, willing to consider partnership connection with sauesge manufacturer who wants the right man to handle his business. W-558, The National Provisioner, Old Colony Bidg., Chicago, Ill.

Experienced Salesman

Who is thoroughly familiar with packing-house and sausage trade wanted for Pacific Coast states by a large import concern. State qualifications, references, etc., also salary ex-pected. Splendid opportunity for right man. W-641, The National Provisioner, Old Colony Bldg., Chicago, Ill.

Want Working Cellar Foreman

Prefer expert curing hams and bacon. Small packing house just starting in business. Located in Texas city of from 60,000 to 70,000 popula-tion. W-619, The National Provisioner, Old tion. W-619, The Natio Colony Bidg., Chicago, Ill.

We Want Salesmen!

If you are a salesman—willing to work, and work like hell—follow instructions and know the meat business, you can make real money selling our \$485.00 specialty in the retail meat industry, which pays for itself quicker than any piece of equipment in the retail market.

Thousands of satisfied users and a big demand is being created through pleased owners.

If you have confidence in yourself—willing to work from 8 a.m. to 5 p.m.—have back-bone—you can earn from \$120.00 to \$400.00 weekly. Others are doing it. We are not looking for weather reporters or drawing account artists, as this is a strict commission proposition for men who are willing to pay the price of success by hard and steady work.

We require such men in practically all parts of the United States to join a large National Sales Organization now forming, but do not reply unless you come up to the above qualifications. Besides having a wish-bone, you must have a lot of

Address W-588, The National Provisioner, Old Colony Bldg., Chicago, Ill.

1519

Refrigerating Engineer Wanted

Wanted, experienced refrigerating engineer familiar with packing plant operations for plant located in Nashville, Tenn. State last ten years experience and salary wanted. W-640, The National Provisioner, Old Colony Bidg., Chicago, Ill.

Position as Sales Manager

Wanted, position as sales manager. 10 years packinghouse selling experience. Now in charge of specialty sales department for large packer. Prefer location in or near Cincinnati. Location is reason for making change. W-639, The National Provisioner, Old Colony Bidg., Chicago, Ill.

Lard Roll Wanted

Second-hand lard roll 3x6, single roll with picker trough and pump. The National Provisioner, Old Colony Bldg., Chicago, Ill.

Refrigerator Cars Wanted

Packer wants two refrigerator cars equipped for overhead carrying. New or good used equipment. W-634, The National Provisioner,

Rendering and Settling Tanks

For sale, three rendering tanks, 14½ feet high by 4½ feet in diameter. Two settling tanks, one round and one square. All these tanks are as good as new, and guaranteed. Address Industrial Iron Works, 359 Van Horne St., Jersey City, N. J.

Grinder Knives and Plates

For sale, knives and plates for No. 62 Enterprise grinder in following sizes: 3, 3/16 knives and plates; 1, % knives and plate; 2, % knives and plates. Weiland Packing Co., Phoenixville, Pa.

Machinery and Tanks

For sale: 10 Anderson oil expellers com-plete, excellent for extracting grease; 12 re-frigerating machines from two to twenty tons capacity; 5 enameled tanks and kettles. Con-solidated Products Co., Inc., 15 Park Row, New York, N. Y.

Modern Business For Sale

For sale, established, modern sausage factory with wholesale meat and provision trade. Location, manufacturing city in Michigan. Growing business. Good opportunity for one or two men with some cash, Reasonable terms, Write for particulars, FS-628, The National Provisioner, Old Colony Bidg., Chicago, Ill.

Ham Boilers For Sale

Aluminum ham boilers, oval style, in sizes 2, 3 and 4B. Apply to FS-624, The National Provisioner, Old Colony Bldg., Chicago, Ili.

Ice Machinery For Sale

ice Machinery For Sale

10 ton Brecht ice machine complete high side
and motor, used 6 mo, \$1,000; 6 ton Remington
ice machine including high side, \$700; 20 ton ice
can plant complete, \$8,500; 10 ton ice can plant
complete, \$2,500; two 30 ton York ice compressors,
steam driven, \$4,500 each, 15,000 ft, 2-in, ammonia pipe, flanges, bends and valves attached.
Chas. S. Jacobowitz, 1382 Niagara St., Buffalo,
N. Y.

Safes For Sale

14 Cary safes, interior size, width 11 inches, depth 10 inches, height 16 inches, weight 600 to 800 pounds; and 9 Cary safes with burgiar proof chest, width 17 inches, depth 16 inches height 21 inches inside measurement, weight 1200 to 1400 pounds. The latter safes with the burglar proof chests are practically brand new. All of these safes are in first-class condition. Owing to a change in our accounting methods, we have no further use for them. Special price for quantity purchase. units, small safes \$80.00. Large safes with chest \$225.00. Edward T. Danahy Company, 602 Babcock St., Buffalo, N. Y.

REFRIGERATING WORLD

is the recognized authority on the practical and technical phases of the ice, cold storage and mechanical refrigerating industries.

PRACTICAL PROBLEMS DEPARTMENT of special interest to the operating engineer; articles, illustrated, appear each month, written by the engineer for the engineer.

Practical problems on operation, selling, new machinery, new installations, etc., appeal to every branch of the trade.

Subscription \$2.00

Sample copy furnished on request.

Refrigerating

New York City 233 Broadway

Builders of Mechanical Stokers for 35 years Sales and Service Offices in All Principal Cities

Address Nearest Office Westinghouse Electric & Míg. Co. Philadelphia Works, Philadelphia, Pa.



There's a Reason!!

A large Packing Company bought one Bannon Separator in the sum-mer of 1921. Three months later, three more were purchased.

After nearly three years' experience with these Separators, this Packing Company has ordered three more Bannon Separators.

Could anything be more convincing?

Full particulars from

The Bannon Company 32 Illinois St, Buffalo, N. Y.

SCRAP PRESS 60 to 900 Tons

At the top in Quality. At the Bottom in Price. Ask us about them.

ing & Boschert Press Co., Inc 382 West Water St., Syraouse, N.Y., U.S.A Established 1872



DRYERS-- EVAPORATORS-- PRESSES RENDERING TANKS AND BY-PRODUCT MACHINERY

THE AMERICAN BY-PRODUCT MACHINERY CO. 36 Certlandt St., New York

The National Provisioner \$3.00 Per Year in U. S. A.

OKERS Grinds Cracklings and Expeller Cake

"Have 3 Williams hammer mills grinding bones, tankage, chicken feed, also cracklings before going to expellers, and can highly recommend them."

M. L. Shoemaker & Co., Philadelphia, Pa.

The ease with which the patented sharp hammers cut through tough material has made the "825" the standard grinder for cracklings, expeller cake and other dry rendered by-products. Endorsements like the above and installations in America's largest plants prove the value of these patented hammers. Wison & Co. now use six. Write for data on the "825" or the "Moguli" for heads, carcasses, entrails and meat cake.

Williams Patent Crusher & Pulv. Co.

2708 N. 9th St., St. Louis, Mo.

W. Van Bur

NEW YORK

SAN FRANCISCO 415 5th St.



STURTEVANT

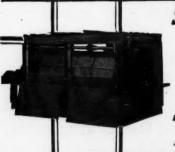


Macerator and Grinder

Bones and Carcasses, **Butchers and Packers Refuse,** Dry or Wet Rendering, Cracklings, Scrap, Tankage, Dry and Green Bone, Expeller Cake.

SPECIAL HAMMERS, CUTTERS AND GRATES to produce maximum outputs.
"OPEN-DOOR" ACCESSIBILITY—belt driven or direct connected.
Roller bearings, heat treated shaft, large feed opening.
USED BY LARGEST PACKERS

STURTEVANT MILL CO., SQUARE BOSTON, MASS.



Solving

Screening Problems
This Hexagon Revolving Screen solves your screening problems—by a simple appliance the screen is automatically tapped, keeping the screen cloth always clean.

Write us for interesting balletin No. 145

Stedman's Foundry & Machine Works AURORA, INDIANA

New York Office: The American By-Product Machinery Co., 26 Courtlandt St. Atlanta Office: Murphey-Rountree Co., Hurt Building, District Sales Representatives.

DAVIDSON" PUMPS



STEAM AND CENTRIFUGAL Oil Lard Brine Boiler Feed

Hydraulic Pressure and all Packing House Services



Centrifugal Pump

M. T. DAVIDSON CO., 154 Nassau St., New York

135 Oliver St., Boston

Established 1877

1011 Chestnut St., Philadelphia

ALPHABETICAL INDEX TO ADVERTISERS

A—Acme Engineering Co. Adrian Knitting Co., The Airoblast Corporation Allbright-Nell Co., The. Allied Packers, Inc. American By-Product Machinery Co. American Casing Co., The. American Casing Co., The. American Schaeffer & Budenberg American Schaeffer & Budenberg American Wire Form Co. Anderson, The V. D. Co. Anderson, The V. D. Co. Angle Steel Stool Co. Angle Steel Stool Co. Arnour and Company Arnold Bros., Inc. Aspegren Co., Inc. Aspegren Co., Inc. Atmospheric Conditioning Corp'n. Autocar Co.	67 17 11 7 57 66 13 16 5 44 46 68 51 20 57 33 43
B—Backus, Jr., & Sons, A. Baker Ice Machine Co Barber-Goodhue Co., A. H. Bartlett & Snow Co., C. O., The Battelle & Renwick Battle, W. P. Bechstein & Co. Bell Co., Wm. G. Bell Co., Wm. G. Berg Casing Co., J. H. Berrigan, J. Boker & Co., H. Borchmann & Stoffregren Boyd-Lunham & Co. Brand & Sons, M. Brecht, Co., The Brennam Packing Co. Broz Joint Aerator Burnette Co., C. A. Burt & Co., M. P.	10 66 14 1 16 64 16 53 17 53 16 60 16 2 10 58 46
C—California By-Products Co. Callender Soldering Process Co. Carter, Fred B. Cary Mfg. Co. Casings Produce Co. Chatillon & Sons, John. Chemical & Engineering Co. Chicago Printed String Co. Cincinnati Butchers' Supply Co., The Cleveland Kleen-Kut Mfg. Co. The Cleveland Kleen-Kut Mfg. Co. The Climax Engineering Co. Columbus Packing Co. Consolidated By-Products Co. Consolidated By-Products Co. Consolidated Bressed Beef Co. Consolidated Redering Co. Cork Import Corp. Corkran, Hill & Co. Cross, Roy, Eberhart & Harris Cudahy Packing Co., The	16 64 18 17 47 1 12 61 16 61 63 42 58 64 60
D—Danahy Packing Co. Darling & Co. Dashew, Leon Davidson Co., M. T. Day Co., J. H., The Decker & Sons, Jacob E. De La Vergne Machine Co. Denholm Bros. & Co., J. M. Diamond Crystal Salt Co. Dold Packing Co., Jacob Drodel Co., Inc., The. Dubuque Steel Products Co. Dunlevy-Franklin Co. Dunning & Boschert Press Co. Durr Packing Co., C. A. Dyer, Arthur	$ \begin{array}{r} 62 \\ \hline 46 \\ \hline 66 \\ \hline 62 \\ \hline 43 \\ \hline 59 \\ \hline 66 \\ \hline 61 \\ \hline 64 \\ \end{array} $
E—Early & Moore, Inc. East Side Packing Co. Enterprise Mfg. Co., The. Ettlinger & Co., M	16 61 27 16
F-Fairbanks, Morse & Co. Felin & Co., John J., Inc. Flash Co., The Edward. Ford Co., The Frick Co.	$\frac{60}{34}$
G—Gardner & Lindberg. Garford Motor Truck Co. Geck, Inc., D. General Box Co. General Motors Truck Co. Greenwald Packing Co. Gruendler Patent Crusher & Pulv. Co. Guggenheim Bros.	64 55 62 48 62
#—Hale Co., H. P. Ham Boiler Corporation Hamier Boiler & Tank Co. Hammond Co., G. H., The Hanak Co., The B. B. Hanley & Co., T. E. Hately Bros. Co. Heekin Can Co. Heil Packing Co. Heil Packing Co. Hetzel & Co. Higble Salt Co. Higble Salt Co. Himmelsbach & Schlich Hoffman Co., Inc., J. S. Hormel & Co., Geo. A. Horne & Supply Co.	59 18 62 58 46 62 45 53 61 57 64
I—Independent Casing & Supply Co Independent Packing Co	16 60

Indianapolis Abattoir Co.		
Jamison Cold Storage Door Co. Johns Anaville Co. Johnston, E. E. Jones Construction Co., H. N. K—Kaeslin Brothers. Kahn Son's Co., E. Kalamazoo Tank & Silo Co. Kalamazoo Tank & Silo Co. Kalamazoo Vegetable Parchment Co. Kalamazoo Tank & Silo Co. Keeley, Thos. F. 16 Kenenett-Murray Skern, Inc., Geo. Skingan & Co. Koene, Silo Co. Koven & Brothers, L. Koon, Inc., Emil. Koven & Brothers, L. Koven & Brothers, L. Koven & Brothers, L. Layton Co., The. 10 Layton Co., The. 11 Layton Co., The. 12 Levi & Co., Inc., Berth. Levi & Co., Inc., Berth. Levi & Co., Inc., Berth. Levi & Co., Harry. Livezey, John R. Los Angeles Casing Co. 11 Mansster & Brose, Harry. 61 Massachusetts Importing Co. 11 Maxwell & Son Mayer & Co., Oscar Morrow Insulating Co. Morrow Rutchers' Supply. 11 North Packing & Provision Co. 61 Oppenheimer Casing Co. 15 Oppenheimer & Co., S. 15 Oppenheimer & Co., S. 16 Oppenheimer & Co., S. 17 Oppenheimer & Co., S. 17 Oppenheimer & Co., S. 18 18 18 18 18 18 18 18 18 1	Indianapolis Abattoir Co	34
Laudenslager, Inc., J. K. 16	Johnston, E. E	38
Laudenslager, Inc., J. K. 16	K-Kaeslin Brothers. Kahn Son's Co., E. Kalamazoo Tank & Silo Co. Kalamazoo Vegetable Parchment Co. Keane Co., T. T. Keeley, Thos. F. Kennett-Murray Kern, Inc., Geo. Kingan & Co. Kingan & Co. Kingan & Son, Henry Kohn, Inc., Emil Koven & Brothers, L. O. Krey Packing Co.	45 51 63 10 39 58 63 39 63
National Box Co.	L—Lang, J. Laudenslager, Inc., J. K. Layton Co., The Levi & Co., Inc., Berth. Levi & Co., Harry. Livezey, John R. Los Angeles Casing Co. Lovell & Christmas.	
National Box Co.	M—McMillan Co., J. T. Manaster & Bros., Harry. March Packing Co., A. H. Massachusetts Importing Co. Maywell & Son Mayer & Co., Oscar Mechanical Mfg. Co. Mid-West Box Co. Miller & Hart. Mono Service Co. Morrell & Co., John Morris & Co. Morrow Insulating Co. Musgrove Knitting Co.	58 62 63 39 63 36 62 12 61
	M—National Box Co	18 27 16
P—Pacific Coast Borax Co. 18 Packers Architectural & Engineering Co. 44 Packers' Machinery & Equipment Co. 46 Packers' Machinery & Equipment Co. 66 Patent Casing Co. 17 Paterson Parchment Paper Co. 18 Perrin & Co. Wm. 11 Pfaelzer & Sons, Inc., Louis 61 Pine & Munnecke Co. 46 Pittsburgh Provision & Packing Co. 46 Pittsburgh Provision & Packing Co. 46		
Procter & Camble Co., The	P—Pacific Coast Borax Co. Packers Architectural & Engineering Co. Packers' Machinery & Equipment Co. Packers' Machinery & Equipment Co. Patent Casing Co. Paterson Parchment Paper Co. Paterson Parchment Paper Co. Perrin & Co. Wm. R. Pfaelzer & Sons, Inc., Louis. Pine & Munnecke Co. Powers Regulator Co., The. Procter & Gamble Co., The.	18 46 63 17 18 12 60 60 60 60 60 60 60 60 60 60 60 60 60

## Randall & Co., R. T.		
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	B-Randall & Co., R. T	-
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Rath Packing Co., The	57
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Real Sausage Co., The	62
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Pempe Company	90
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Ridgway & Son Co Craig	19
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Riley Jr. C W	46
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Bispel & Co. A.	14
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Rogers, F. C	31
## St. Louis Independent Packing Co. 57 San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Supringforn, W. J. 14 Springforn, W. J. 14 Springforn, W. J. 64 Springforn, W. J. 65 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 67 Stevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 ### Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 17 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 67 Vilter Mfg. Co., The. 67 Vilter Mfg. Co. 66 Wilting & McMurray 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 68 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilting & McMurray 78 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson	Rohe & Brother	1
San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Springborn, W. J. 14 Springfield Provision Co. 60 Squire & Co., John E. 60 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 60 Sterling Wheelbarrow Co. 60 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 61 Vogt & Sons, Inc., F. 67 Vulcan Iron Works — 67 Vilseman & Co., The. 67 Vilsem Iron Works — 68 W—Waste Saving Machine Co. 66 Wilson & Co. 64 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 60 Wi		
San Francisco Salt Refinery 18 Sausage Mold Corporation 64 Scandrett, L. A. 17 Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweisheimer & Fellerman 16 Shafer & Co. 63 Schweisheimer & Fellerman 16 Shafer & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 54 Smith Scale Co. 54 Smith Scale Co. 55 Springborn, W. J. 14 Springfield Provision Co. 60 Squire & Co., John E. 60 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 66 Sterling Wheelbarrow Co. 60 Sterling Wheelbarrow Co. 60 Sturtevant Mill Co. 66 Sullivan Packing Co. 63 Sutherland Paper Co. 63 Sutherland Paper Co. 24 Swift & Co. 44 T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United Iron Works — 61 Vogt & Sons, Inc., F. 67 Vulcan Iron Works — 67 Vilseman & Co., The. 67 Vilsem Iron Works — 68 W—Waste Saving Machine Co. 66 Wilson & Co. 64 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 60 Wi	C St Louis Independent Packing Co	27
Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweishelmer & Fellerman 16 Shafer & Co. 63 Short Milling Co., J. R. 55 Sinclair & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 7 Smith's Sons Co., John E. 63 Springborn, W. J. 61 Springfield Provision Co. 61 Squire & Co., John P. 61 Stahl, Otto, Inc. 60 Standard Casing Co. 7 Squire & Co., John P. 61 Stedman's Foundry & Machine Works 66 Sterling Wheelbarrow Co. 66 Sterling Whaelbarrow Co. 67 Stern & Sons, Joseph 60 Sturtevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Stullivan Packing Co. 66 United Drown Marking Co. 64 T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United States Can Co. 7 U—United Cork Co. 7 United States Can Co. 7 U—Van Gelder & Co., G. 17 Vilter Mfg. Co., The. 57 Vulcan Iron Works 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Welliams Patent Crusher & Pulv. Co. 66 Wilson & Co. 62 Wilson & Co. 62 Wilson & Co. 62 Wilson & Co. 63 Wilson & Co. 64 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson & Co. 67 Whapatskill Mfg. Co. 51	San Francisco Salt Refinery	19
Schluderberg, T. J. Kurdle Co., The Wm. 57 Schroth Packing Co., J. & F. 60 Schwartz-Feaman-Nolan Co. 38 Schweishelmer & Fellerman 16 Shafer & Co. 63 Short Milling Co., J. R. 55 Sinclair & Co., Ltd., T. M. 62 Skipworth, E. W. 63 Smith Scale Co. 7 Smith's Sons Co., John E. 63 Springborn, W. J. 61 Springfield Provision Co. 61 Squire & Co., John P. 61 Stahl, Otto, Inc. 60 Standard Casing Co. 7 Squire & Co., John P. 61 Stedman's Foundry & Machine Works 66 Sterling Wheelbarrow Co. 66 Sterling Whaelbarrow Co. 67 Stern & Sons, Joseph 60 Sturtevenson Cold Storage Door Co. 43 Sturtevant Mill Co. 66 Stullivan Packing Co. 66 United Drown Marking Co. 64 T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 United Dressed Beef Co. 58 United States Can Co. 7 U—United Cork Co. 7 United States Can Co. 7 U—Van Gelder & Co., G. 17 Vilter Mfg. Co., The. 57 Vulcan Iron Works 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Welliams Patent Crusher & Pulv. Co. 66 Wilson & Co. 62 Wilson & Co. 62 Wilson & Co. 62 Wilson & Co. 63 Wilson & Co. 64 Williams Patent Crusher & Pulv. Co. 66 Wilson & Co. 66 Wilson & Co. 67 Whapatskill Mfg. Co. 51	Sausage Mold Corporation	64
Springborn, W. J. 14	Scandrett, L. A.	17
Springborn, W. J. 14	Schluderberg, T. J. Kurdle Co., The Wm.	57
Springborn, W. J. 14	Schroth Packing Co., J. & F	60
Springborn, W. J. 14	Schwartz-Feaman-Nolan Co	38
Springborn, W. J. 14	Schweisheimer & Fellerman	16
Springborn, W. J. 14	Shafer & Co	63
Springborn, W. J. 14	Short Milling Co., J. R	-
Springborn, W. J. 14	Shipworth E W	62
Springborn, W. J. 14	Smith Scale Co	63
Springborn, W. J. 14	Smith's Sons Co. John E	6
Springborn, W. J. 14	Southwark Foundry and Machine Co	9
Superior Packing Co. 63	Springborn, W. J.	14
Superior Packing Co. 63	Springfield Provision Co	-
Superior Packing Co. 63	Squire & Co., John P	61
Superior Packing Co. 63	Stahl, Otto, Inc	60
Superior Packing Co. 63	Standard Casing Co	16
Superior Packing Co. 63	Stedman's Foundry & Machine Works	66
Superior Packing Co. 63	Sterling Wheelbarrow Co	45
Superior Packing Co. 63	Stern & Sons, Joseph	60
Superior Packing Co. 63	Sturtevent Mill Co	43
Superior Packing Co. 63	Súllivan Packing Co	60
T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomson & Taylor Co. 64 U—United Cork Co. — United Dressed Beef Co. 58 United Iron Works. — United States Can Co. — V—Van Gelder & Co., G. 17 Vilster Mfg. Co., The. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 65 W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilson & Co. 56 Wirfs, E. J. — Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51	Superior Packing Co.	63
T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomson & Taylor Co. 64 U—United Cork Co. — United Dressed Beef Co. 58 United Iron Works. — United States Can Co. — V—Van Gelder & Co., G. 17 Vilster Mfg. Co., The. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 65 W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilson & Co. 56 Wirfs, E. J. — Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51	Sutherland Paper Co	00
T—Theurer-Norton Prov. Co., The. 59 Thomas-Allbright Co. 64 Thomson & Taylor Co. 64 U—United Cork Co. — United Dressed Beef Co. 58 United Iron Works. — United States Can Co. — V—Van Gelder & Co., G. 17 Vilster Mfg. Co., The. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 65 W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilson & Co. 56 Wirfs, E. J. — Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51	Swenson Evaporator Co	24
Thomas-Albright Co. 64 Thomas-Albright Co. 64 Thomas-Albright Co. 64 United Cork Co. 7 United Dressed Beef Co. 58 United Iron Works 7 United States Can Co. 7 Viseman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 67 Vulcan Iron Works 68 W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilmington Provision Co. 62 Wilson & Co. 62 Wirfs, E. J. 66 Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51	Swift & Co	4
Thomas-Albright Co. 64 Thomas-Albright Co. 64 Thomas-Albright Co. 64 United Cork Co. 7 United Dressed Beef Co. 58 United Iron Works 7 United States Can Co. 7 Viseman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 67 Vulcan Iron Works 68 W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilmington Provision Co. 62 Wilson & Co. 62 Wirfs, E. J. 66 Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51		
Thomas-Albright Co. 64 Thomas-Albright Co. 64 Thomas-Albright Co. 64 United Cork Co. 7 United Dressed Beef Co. 58 United Iron Works 7 United States Can Co. 7 Viseman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 61 Vogt & Sons, Inc., F. 67 Vulcan Iron Works 68 W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilmington Provision Co. 62 Wilson & Co. 62 Wirfs, E. J. 66 Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51	T-Theurer-Norton Prov. Co., The	59
U—United Cork Co	Thomas-Allbright Co	
U—United Cork Co	Thomson & Taylor Co	64
U—United Cork Co. 58 United Dressed Beef Co. 58 United Iron Works	A STATE OF THE STA	-
▼—Van Gelder & Co., G	U-United Cork Co	
▼—Van Gelder & Co., G	United Dressed Beef Co	5.8
▼—Van Gelder & Co., G	United Iron Works	
▼—Van Gelder & Co., G. 17 Vilter Mfg. Co., The 61 Vissman & Co., Inc., C. F. 61 Vogt & Sons, Inc., F. G. 57 Vulcan Iron Works 68 ▼—Waste Saving Machine Co. 10 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv. Co. 66 Wilmington Provision Co. 62 Wiston & Co. 66 Wirfs, E. J. 66 Wynantskill Mfg. Co. 18 ▼—York Manufacturing Co. 51	United States Can Co	
W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilnington Provision Co. 62 Wilson & Co. 56 Wirfs, E. J. 18 Y—York Manufacturing Co. 51		
W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilnington Provision Co. 62 Wilson & Co. 56 Wirfs, E. J. 18 Y—York Manufacturing Co. 51	V-Van Gelder & Co., G	17
W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilnington Provision Co. 62 Wilson & Co. 56 Wirfs, E. J. 18 Y—York Manufacturing Co. 51	Vilter Mfg. Co., The	
W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilnington Provision Co. 62 Wilson & Co. 56 Wirfs, E. J. 18 Y—York Manufacturing Co. 51	Vissman & Co., Inc., C. F	61
W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilnington Provision Co. 62 Wilson & Co. 56 Wirfs, E. J. 18 Y—York Manufacturing Co. 51	Vogt & Sons, Inc., F. G	57
W—Waste Saving Machine Co. 68 Western Butchers' Supply Co. 10 Westinghouse Electric & Mfg. Co. 66 Wheeling Corrugating Co. 14 Whiting & McMurray 38 Williams Patent Crusher & Pulv Co. 66 Wilnington Provision Co. 62 Wilson & Co. 56 Wirfs, E. J. 18 Y—York Manufacturing Co. 51	Vulcan Iron Works	68
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51		
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51	W-Waste Saving Machine Co	68
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51	Western Butchers' Supply Co	10
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51	Westinghouse Electric & Mig. Co	. 66
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51	Whiting & McMurray	14
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51	Williams Patent Crusher & Puly Co	66
Wirfs, E. J 3 Wynantskill Mfg. Co. 18 Y-York Manufacturing Co. 51	Wilmington Provision Co	69
Wynantskill Mfg. Co. 18 Y—York Manufacturing Co. 51	Wilson & Co	56
Y-York Manufacturing Co 51	Wirfs, E. J	-
Y-York Manufacturing Co 51	Wynantskill Mfg. Co	18
Z—Zaun, H. C 64	Y-York Manufacturing Co	51
Z-Zaun, H. C 64		
	Z—Zaun, H. C	64



The Acme Combination Sanitary Rendering and Drying Machine

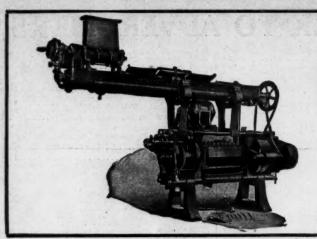
The inner shell is corrugated which eliminates staybolts.

The bottom heads are reinforced by special construction which prevents sagging.

The most efficient equipment on the market.

WRITE FOR BULLETIN No. 3

The Acme Engineering Co.
201 Beckel Bldg., Dayton, Ohio



More Profit in Cracklings

Cracklings made in the Anderson Crackling Expeller contain a higher percentage of ammonia and lower percentage of grease, and will therefore show a profit of approximately \$10 per ton over hydraulic-pressed cracklings.

Write for complete information

Manufactured by

The V. D. Anderson Co.

1985 W. 96th Street

Cleveland, Ohio

CRACKLINGS OR TANKAGE in a Vulcan Renderer and Dryer

Odorless Vapor Systems

Renderer No. 2-6000 lbs. Per Charge

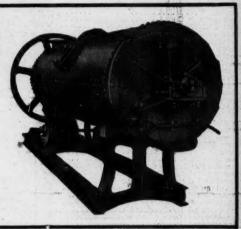
Renderer No. 3—4000 lbs. Per Charge Renderer No. 4—2000 lbs. Per Charge

Tanks of Every Description

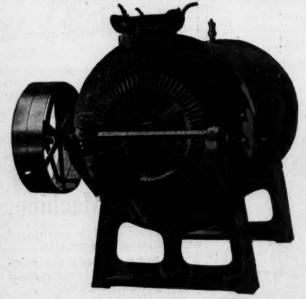
EST. 1848

VULCAN IRON WORKS, Inc.

JERSEY CITY, N. J.



More Than 400 Plants Equipped



with

Rapid Fat Melter

for Dry Cooking

Manufactured by

WASTE SAVING MACHINE CO.

1509 Real Estate Trust Bldg. PHILADELPHIA, PA.

